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F.A.

THE ART BULLETIN

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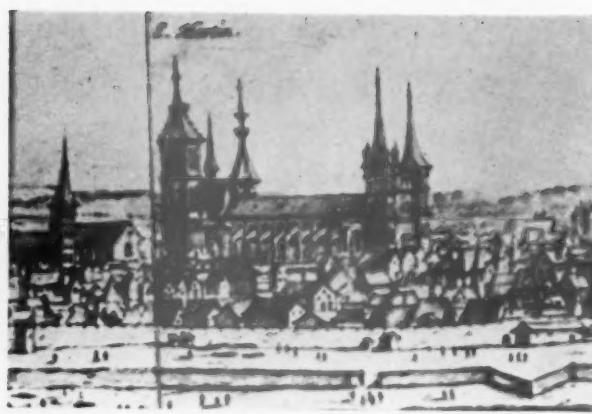


FIG. 1. Detail of Seventeenth-Century Engraving

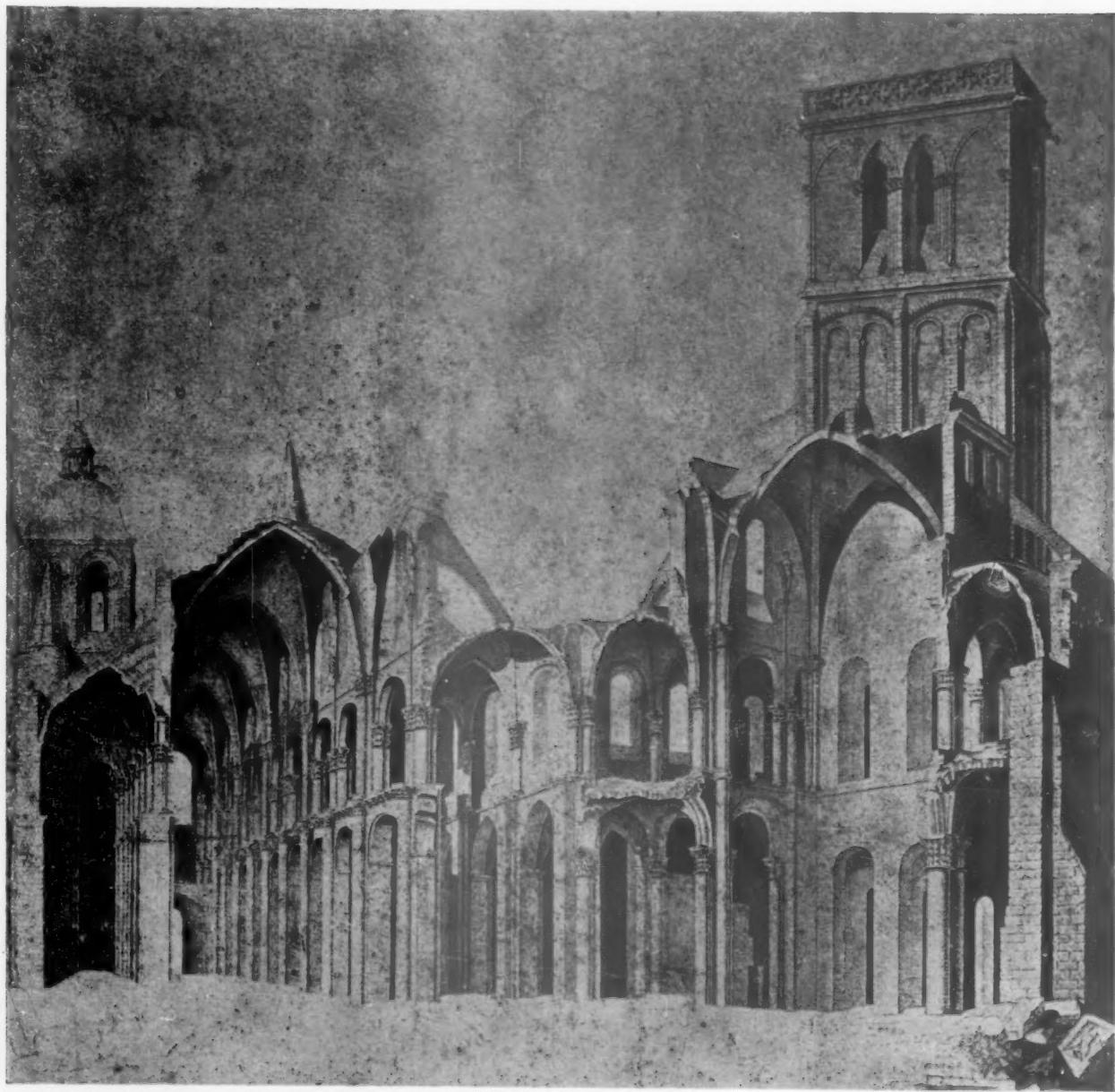


FIG. 2. Wash Drawing (ca. 1798)

FIGS. 1-2. TOURS, SAINT-MARTIN

THE CHURCH OF SAINT-MARTIN AT TOURS (903-1150)¹

BY CARL K. HERSEY

IN THE EFFORTS of historians to penetrate the obscurity of the past and to comprehend its institutions and material accompaniments, the task of the architectural historian is hampered by the problem of lost monuments. Such structures, destroyed by neglect or vandalism and lost a second time by being forgotten, create a serious hiatus in the continuity of architectural history which, unless recognized and rectified, may distort the true pattern of development. Arguments based solely on extant monuments are manifestly founded on incomplete evidence and can readily lead to erroneous conclusions. A knowledge of important lost monuments is essential to the proper interpretation of living structures. The return to knowledge of such an influential monument as Cluny dramatically shows what a cornerstone for archaeological argument a lost structure may be. The reconstitution of these missing components of the architectural totality of the past becomes a special problem for the scholar which demands not merely careful scrutiny of every vestige of source material that time and man have spared, but also much patience and judgment in interpreting it.

The church of Saint-Martin at Tours has long been recognized as one of these lost keys to vital problems in mediaeval architecture that cannot be solved until accurate information concerning the structure has been brought to light. That it was one of the conspicuous mediaeval edifices of France, there can be no doubt. In its developed Romanesque form it was grand in scale,² and was among the few churches of Europe characterized by such special features as five aisles,³ aisled transepts,⁴ and tribunes making a partial circuit of the structure. It was the greatest pilgrimage church within the confines of France and enjoyed wealth and power. Its loss through human indifference is tragic and irreparable, not only for its intrinsic worth, but because its disappearance has resulted in a lacuna in architectural history which has blocked the solution of important problems. It is not alone the form of the church at the various periods of its complicated history which requires definition, but especially the part it plays in the larger realm of mediaeval architecture, that justifies the labor involved in its reconstruction. Such an achievement, once completely realized, will restore the successive forms of one of the great churches of Christendom for whatever merits it possessed; it will clarify the rôle of Touraine in the formative period of

1. The author is greatly indebted to Professor Kenneth Conant of Harvard University who suggested the present study and by his sustained interest and helpful suggestions has given the writer constant encouragement. Grateful appreciation is herewith tendered to the American Council of Learned Societies for generous financial assistance which made possible the foreign study that underlies this research. Utilizing the graphic technique of research so successfully developed by Professor Conant in his work at Cluny and elsewhere, the writer hopes eventually, when conditions permit further study abroad, to produce a monograph on the church of Saint-Martin which will supplant in definitiveness the necessarily tentative nature of some of the conclusions arrived at in this article.

2. Its dimensions at the height of its Romanesque grandeur were approximately as follows:

length, 97 meters
width, 33½ meters
length of transept, 68 meters
width of nave, 9 meters
width of transept, 8 meters
height of nave vault, 23 meters

3. Other five-aisled structures include the Old Cathedral of Orléans, Saint-Bénigne at Dijon, Cluny III, Saint-Sernin at Toulouse, La Charité-sur-Loire, Souvigny, Ripoll in Catalonia, and the Cathedral of Pisa.

4. Aisled transepts occur in the Old Cathedral of Orléans, at Saint-Remi at Reims, Saint-Sernin at Toulouse, Saint-Martial at Limoges, and Sainte-Foi at Conques.

Romanesque architecture;⁵ it will establish the place of the church of Saint-Martin in the Pilgrimage School; and it will contribute to the solution of the problem of the development of the ambulatory. It is the purpose of this study to restore the church graphically in its Romanesque phases in so far as is now possible on the basis of present evidence, and to attempt an evaluation of its significance in architectural history.

The evolution of the church of Saint-Martin falls into three general phases: (1) the succession of Merovingian and early Carolingian churches extending from the time of Saint Brice and Saint Perpet to the devastation of Touraine by the Normans throughout the second half of the ninth century, (2) the late Carolingian and Romanesque churches dating from the early tenth to the middle of the twelfth century, and finally, (3) the Gothic modifications and additions of the late twelfth, thirteenth, and fourteenth centuries, which considerably altered the Romanesque structure. The present study is concerned chiefly with the second phase which includes the constructional activity at the site of the tomb of Saint Martin from the termination of the Norman raids in 903 to the middle of the twelfth century, a vital period in mediaeval architecture, including as it does the climax of the Capetian basilica and the birth of the true Romanesque style. The church of Saint-Martin is subject to the evolutionary forces of the period, and reveals in its changing fabric a veritable cross-section of the formative processes of Romanesque architecture.⁶

Within this period Saint-Martin emerges as a contributor of two features of enormous significance, the ambulatory with radiating chapels, and the special Pilgrimage formula of vaulted construction. For its status in the development of these factors alone, irrespective of whatever intrinsic beauty its own form possessed, the church of Saint-Martin, hitherto almost completely lost to human knowledge since its destruction at the end of the eighteenth century, merits the closest study, so that it may be returned to its rightful place in mediaeval architecture.

Unlike the early phases of the church wherein evidence for its reconstruction is contained chiefly in the writings of Gregory of Tours and Sidonius Apollinaris, the late Carolingian, Romanesque, and Gothic phases may be studied from a certain amount of visual evidence, both archaeological and graphic, as well as literary. Although scattered and incomplete, the source material, properly integrated and interpreted, contributes much to the establishment of the form of the church at various periods, and makes possible a considerable degree of synthesis between the successive architectural states and the frequent but vague documentary references to conflagrations and rebuildings. The problem cries for systematic excavation, but until the time when such a program is possible, the main lines of development, together with a considerable amount of detail, may be deduced from the evidence at hand.

A study of the collegiate church⁷ in its present almost non-existent condition must be based on the facts contained in references in documents of various periods interpreted in the light of information provided by graphic sources and archaeological remains. An exhaustive study of the evidence and the embodiment of the data in scale drawings permit a visual reconstruction of the church in its various states which in turn serves as the basis for evaluating the significance of the structure in architectural history.

Mediaeval literary sources record numerous dates of conflagrations and rebuildings but

5. Abbé Plat, "La Touraine, berceau des églises romanes du sud-ouest," *Bulletin monumental*, LXXVII, 1913, pp. 346-378; *L'art de bâtir en France des romains à l'an 1100 d'après les monuments anciens de la Touraine, de l'Anjou et*

du Vendômois, Paris, 1939.

6. The First Romanesque style of architecture, however, did not affect Touraine.

7. Saint-Martin was an abbey until the ninth century.

they are exasperatingly inexplicit as regards the parts destroyed and subsequently rebuilt. Chroniclers must be classed as romantic historians more impressed with the catastrophic aspects of a fire than with the architectural implications which attended it. Of more scientific value is the archaeological and graphic source material. The most important archaeological sources include the two extant towers of the church, one the Tour Charlemagne (Figs. 3-8),⁸ which stands at the extremity of the destroyed north transept, and the other the south-façade tower known as the Tour de l'Horloge (Fig. 2);⁹ likewise important is the masonry of two ambulatories of different date excavated between the time of the discovery of the site of the tomb of Saint Martin in 1860 and the erection in 1886 of the modern church¹⁰ over a part of the foundations of the mediaeval structure (Figs. 10, 13).¹¹ The chief items of graphic source material include the accurate, large-scale plan of the church drawn in 1779 by Jean Jacquemin not long before its destruction (Fig. 12), the plan of Saint-Martin and the surrounding area drawn in 1762 at the order of the Chapter, an anonymous plan attached to the manuscript history of Saint-Martin by Chalmel and preserved in the library at Tours, a perspective wash drawing of the partially ruined church made in 1798 on the eve of its destruction (Fig. 2),¹² several seventeenth-century topographical engravings of Tours which show the church (Fig. 1), a perspective drawing of the excavations of the 1880's executed by Jules Masquelez and preserved in the Musée Archéologique at Tours (Fig. 10),¹³ and the Borrel lithograph of the exterior of the structure.¹⁴

Among the later writings as distinguished from mediaeval literary sources, the manuscript history of Saint-Martin by Chalmel, in the library at Tours, furnishes by far the best description of the church as it was just before its demolition.¹⁵

8. The southern half of the Tour Charlemagne fell on March 28, 1928. From an artistic point of view the crash was a catastrophe, but it was not without value archaeologically, since later revetments were torn away revealing original parts and dispositions hitherto unknown (Fig. 6). See A. Bray, "La Tour Charlemagne," *Bulletin de la Société archéologique de Touraine*, xxiv, 1928-30, pp. 137-164.

9. In references to parts of the church which were extant when studied by the author before the war, the present tense will be used, although the bombing of Tours in the summer of 1940 may have resulted in the destruction of some of the remains formerly visible.

10. For an account of the pious efforts made by devotees of the Cult of Saint Martin after the discovery of the site of the tomb to rebuild the church on the foundations of the mediaeval structure, and the eventual compromise on the present edifice designed by Laloux, see Dom Besse, *Le tombeau de Saint-Martin de Tours*, Paris, Tours, 1922.

11. Vestiges of two ambulatories with radiating absidioles and a part of the south transept were revealed by the excavations. Fortunately the remains were accurately drawn to scale by Émile Parcq, but their interpretation was the basis of a bitter controversy between Mgr. Chevalier and Stanislas Ratel. See Casimir Chevalier, "Le tombeau de Saint-Martin à Tours, étude historique et archéologique," Tours, 1880; "Le tombeau de Saint-Martin à Tours," *Bull. Soc. arch. Touraine*, v, 1883, p. 32; "Le plan du chevet de Saint-Martin au VI^e siècle," *ibid.*, pp. 286-289; "Les fouilles de Saint-Martin de Tours," *Bulletin monumental*, 1887, pp. 587-594; *Les fouilles de Saint-Martin de Tours; recherches sur les six basiliques successives élevées autour du tombeau de Saint-Martin*, Tours, 1888; *Les fouilles de Saint-Martin, note complémentaire*, Tours, 1891; *Le plan primitif de Saint-Martin de Tours, d'après les fouilles et les textes*, Paris, 1892. See also Stanislas Ratel, *Les basiliques de Saint-*

Martin à Tours, fouilles exécutées à l'occasion de la découverte de son tombeau, Bruxelles, 1886; "Quelques observations sur un mémoire de Mgr. Chevalier intitulé *Les fouilles de Saint-Martin de Tours*," *Bull. Soc. arch. de Touraine*, vii, 1886-88, pp. 380-385; *Les basiliques de Saint-Martin à Tours, supplément; quelques observations sur les dernières fouilles exécutées en 1887, à l'occasion de la construction d'une chapelle de secours*, Tours, Paris, 1890; *Les basiliques de Saint-Martin à Tours, note supplémentaire en réponse à une note complémentaire de Mgr. Chevalier sur les fouilles de Saint-Martin de Tours*, Tours, Paris, 1891; *Revue retrospective des travaux archéologique occasionés par les fouilles du sol des basiliques de Saint-Martin autour de son tombeau*, Tours, 1897; *Du lieu de sépulture de Saint-Martin à Tours*, Tours, 1889.

Both Chevalier and Ratel erred in trying to recognize vestiges of the Merovingian churches in the foundations discovered. Robert de Lasteyrie (*L'église Saint-Martin de Tours, étude critique sur l'histoire et la forme de ce monument du V^e au XI^e siècle*, Paris, 1891), and Charles de Grandmaison ("Résultat des fouilles de Saint-Martin de Tours en 1886," *Bibliothèque de l'École de Chartres*, 1893, pp. 75-85) did much to rectify the interpretation of the evidence.

12. This particularly important source is preserved in the archives of the Monastery of Ligugé. The drawing served as the inspiration for the woodcut appearing in *La Touraine* by Bourassé (1855) and for a large lithograph, a copy of which is in the possession of the writer. Executed after the destruction of the church, both of the latter were pictorialized and are of limited value as evidence.

13. A number of photographs also exist of the excavations, some of which are published in the pamphlets of Chevalier and Ratel.

14. Published by Dom Besse, *op. cit.*, pl. II. This is inaccurate in many details.

15. This important work is unpublished but it is quoted

The technique of restoration involves the integration of data provided by the Jacquemin plan of 1779 with the extant remains and with the graphic and descriptive sources. The result obtained is the church in its final state with Gothic alterations profoundly modifying the Romanesque elevation. Underlying these Gothic intrusions are the late Carolingian and Romanesque fabrics which must be isolated and reconstructed.

Documentary sources provide a fairly complete record of the vicissitudes of the church from the end of the Norman raids in the early tenth century to its final destruction. Touraine recovered quickly following the withdrawal of the Normans. The treaty of Saint-Clair-sur-Epte in 911 opened for Normandy, Touraine, Maine, and Anjou an era of relative tranquillity. The relics of Saint Martin had been saved from destruction, and the tenth century became a great era of pilgrimage to the tomb. Increasing resources insured a vigorous building program after the hiatus caused by the Norman devastations.

Following the last pillage of the *bourg* of Saint-Martin in 903, the church of Saint-Martin was rebuilt and consecrated in 918. Both the church and the town were at this time provided with the protection of fortified walls which were finished by 918. The text of the *Sermon of Saint Odo* implies that the church was again damaged by fire shortly before Odo preached, about 930. In 997 Châteauneuf, as the *bourg* was now called, with the church of Saint-Martin and twenty-two others, was burned. The church was immediately rebuilt at the expense of the wealthy treasurer of the Chapter, Hervé de Busançais, and consecrated in 1014. The next recorded disaster occurred in 1096 when, during the fêtes and ceremonies accompanying the visit of Pope Urban II to Tours, fire damaged the chevet. In 1122 in the course of the struggle between the bourgeoisie of Châteauneuf and the Chapter of Saint-Martin, the church again was visited by fire. In 1175 the structure was being partly rebuilt in the new Gothic style. In 1202 the English, having retaken Tours from the French, burned Châteauneuf and a part of the church of Saint-Martin. Philippe Auguste soon reunited Tours to the Crown, and the chevet of Saint-Martin was reconstructed in the High Gothic style of the Ile-de-France.¹⁶ In the fourteenth century the addition of chapels between the wall buttresses on the south flank of the church brought the structure to the form in which it existed at the time of its demolition four centuries later, after which only the Tour Charlemagne and the Tour de l'Horloge survived to mark the site of the venerable *collégiale*. In 1928 through neglect and abuse the southern half of the former tower fell, and only the spirited resistance of the people of Tours, threatened with the total loss of a precious landmark, prevented the razing of the remainder of the tower.

Notwithstanding the well-documented sequence of fires and rebuildings, the task of working out the forms associated with these events is complex indeed, for the graphic and late documentary sources depict the church in its hybrid Romanesque-Gothic state with much of its earlier character obliterated, and only the most exhaustive study of the evidence in relation to parallel and radial structures permits a restoration of the earlier phases of its evolution. The process consists of working backwards from the well-established final state of the monument to the earlier and more significant forms.

In an analysis of Saint-Martin directed toward a determination of its form, it is logical

in part in J.-X. Carré de Busserolle, *Dictionnaire géographique, historique et biographique d'Indre-et-Loire et de l'ancienne province de Touraine*, (*Mémoires de la Société archéologique de Touraine*, xxxii), Tours, 1884, vi, pp. 246 ff.; in Ratel, "Note sur un croquis de Beaumenil," *Bull. Soc. arch. Touraine*, vii, 1886-88, p. 483; and in E. R. Vau-

celle, *La collégiale de Saint-Martin de Tours des origines à l'avènement des Valois* (*Mémoires de la Société archéologique de Touraine*, xlvi), Tours, 1907, pp. 396-397.

16. Considerable building activity was in progress in and near Tours at this time, notably at the Cathedral and Saint-Julien at Tours, and at Marmoutier.

to begin with the extant Tour Charlemagne and study it in relation to evidences of Romanesque construction that are apparent in the Jacquemin plan, the wash drawing, and the vestiges of the two transept piers which until recently were visible next to the tower. The Tour Charlemagne in its original state and particularly after the revelations of the partial collapse of 1928 provides valuable information pertaining to the Romanesque and Gothic forms of the adjoining transept. The tower was grafted on to the end of a pre-existing transept, the inner half occupying the terminal bay of the transept, the outer half projecting beyond the plane of the transept façade as an open tower-porch. Above a groin-vaulted ground stage rose a vaulted chamber about eight meters square and sixteen meters high (Fig. 17). The heavy vault approximates the cloister form, but is supported on two heavy crossed ribs of rectangular section which spring from engaged columns in the center of each wall and cross at the top of the vault without the presence of a keystone (cf. Fig. 11). Seven windows provided illumination, the space for the eighth being occupied by a stair turret on the west side. Above the vaulted chamber originally rose a belfry stage analogous in function if not in form to that which formerly existed on the tower at Cormery. With the introduction of Gothic vaults in the twelfth century, the belfry stage became too low and was replaced by one of greater elevation.¹⁷ The topmost stage was added in the fourteenth century. Subsequent revetments, which were added to the tower to strengthen it, obscured much of its original character until the disaster of 1928 stripped away some of the poorly bonded masonry and revealed the original dispositions (Figs. 6, 7).

A comparison of the Tour Charlemagne with the plan of the corresponding but much less-altered south-transept tower,¹⁸ as recorded on the plan of 1779 (Fig. 12), with the group of analogous towers in the vicinity, and with the wash drawing (Fig. 2) furnishes considerable evidence as to the character and date of the entire transept. The drawing constitutes the chief source of knowledge concerning the elevation of both the transept and the nave. Fortunately the accuracy with which it depicts the extant towers of the church inspires confidence in the reliability of the representation of the portions no longer in existence.

A study of the drawing and the south wall of the Tour Charlemagne before its fall (Fig. 3) reveals that at the time of the razing of the church the transept preserved much of its Romanesque fabric beneath the later additions. Obviously Gothic are the ribbed vaulting of the transept and the slender colonnettes introduced for the support of the diagonal ribs. The colonnettes rise from the level of the tribune and are placed in the angle made by the refaced tower and the tribune (Fig. 4) and at each side of the main wall shafts.¹⁹ Gothic ribbed vaulting also replaced the Romanesque quadrant vaults over the tribunes, flying buttresses were introduced to carry off the thrusts of the Gothic vaults, and a third stage replaced the original belfry of the Tour Charlemagne to elevate the tower above the lofty new roof required by the Gothic vaults (Fig. 3).

Less obviously but not less certainly Gothic is the thick revetment of the south side of the tower between the triforium level and the great round arch that marks the level of the former Romanesque vaulting, the two slightly pointed windows in this wall which open on the Romanesque vaulted compartment, the refacing masonry between the line of the barrel

17. The flashing grooves of the Gothic roof may be clearly discerned in old photographs of the south face of the tower (Fig. 3).

18. Known as the Tour Cadran or Tour Gibert.

19. The early nineteenth-century lithograph based on the

original wash drawing erroneously represents the colonnette supporting the diagonal rib of the Gothic vault as a *dosseret* similar to those used in the tribune level of the nave for the same purpose.

vaulting and the northern Gothic transverse rib, and the narrow bay of the tribune on each side contiguous to the tower which results from the curtailment of the former Romanesque bay by the refacing wall and the subsequent rebuilding of the interval with a narrow stilted archivolt of Gothic profile.²⁰

With these additions accounted for, the vestiges of the underlying Romanesque fabric may be worked out and evaluated as to form and date. The plan of 1779, purged of its Gothic accretions, and checked with the other sources, reveals a pier system in the transept of three distinct forms: a square core with an engaged colonnette on each face (Fig. 9),²¹ a slender cylindrical core with four engaged colonnettes (Fig. 12),²² and a more complex crossing pier consisting of a large cylindrical core with four engaged columns on pilasters (Figs. 12, 14),²³ the latter two types belonging to a mid-eleventh century alteration. The square-core pier with a colonnette engaged to each face commands special attention, for there is every indication that it represents the original supporting element in the transept. Later the form was to become one of the standard piers of Romanesque architecture.

In the Romanesque period the colonnettes on the inner side of the transept piers rose to the spring of the barrel vaulting, traversed perhaps by the moulding of the triforium string course. This is apparent in the wash drawing where the two colonnettes that are depicted, unlike those in the nave, have no capitals. The colonnette of the northernmost pier had to be cut down or replaced when the Gothic vaults were added, for the alternate system of support adopted for the later vaulting gave this element nothing to uphold.²⁴ Beneath the main conoids, however, a heavy colonnette was required for the support of the transverse arch of the ribbed vaulting, and unless the entire tribune level was rebuilt, there would seem to be no reason to replace the original member already in place. Unlike the arrangement in the nave where the main shafts on the tribune level are set back and break continuity with the columns below,²⁵ the single example shown in the drawing continues the line of the lower colonnette unbroken except for mouldings. On the other hand, indication of a moulded base at the level of the triforium string course could be taken to indicate that the shaft was rebuilt at the time the flanking colonnettes were added and is therefore a product of the Gothic transformation.²⁶

The Romanesque groin vaulting in the transept aisles was kept intact along with the wall responds (Fig. 2), and the tribune floor is original. The tribune arches opening onto the transept are round-headed, like the original arches still visible on the flanks of the Tour Charlemagne (Figs. 5, 7).²⁷ However, the archivolt is characterized by a Gothic moulding, and either the Romanesque arch was recut or the entire triforium level was rebuilt (Fig. 2). The wash drawing depicts the same moulding on the tribune arches of the nave. Abbé Plat describes the intrados of the tribune arches as adorned with a large torus moulding, but he

20. See sketch dated 1898 showing remains of this arch in Guérinne, *Le vieux Tours*, Paris, ca. 1898, pl. 14.

21. The square cores of these piers cannot be interpreted as the original supports complicated later by the addition of colonnettes, as a comparison with the earlier cores of the heterogeneous nave piers shows. The latter are heavier and definitely rectangular in section, while those of the transept are homogeneous masses and apparently somewhat later in date.

22. This form is found at Moutierneuf at Poitiers and at Moirax (Lot-et-Garonne).

23. This form also occurs at the crossing of La Trinité, Vendôme, in the porch of Saint-Benoit-sur-Loire, at Sainte-Croix-de-Loudon, Mozat, and Saint-Pierre-sur-Dives.

24. This results in a cluster of four columns of quatrefoil section curiously similar to that in the tower of La Trinité at Vendôme above the vaulted chamber.

25. The whole tribune level in the nave was certainly rebuilt when the Gothic alterations were made.

26. Cf., however, the alternate supports at Sainte-Foi at Conques where colonnettes at the tribune level have moulded bases resting on pilasters that rise from the nave piers. Cf. also the same arrangement on the narthex of Saint-Germain at Auxerre, consecrated in 865.

27. There is no indication within the tribune arch of paired arches separated by columns, although this common device may have been present. Cf. the arches in the triforium gallery of Saint-Étienne at Caen.

is probably referring to their original state.²⁸ If so, the arches would be Romanesque, but with a Gothic profile definitely indicated, the semicircularity of the arch must be explained by its early Gothic date when pointed forms were largely reserved for structural positions, and non-functional archivolts were still round.²⁹

The profile of the transept arcade arches can be determined by an examination of the pier which until 1928 stood to the right and in front of the south face of the Tour Charlemagne, connected to it by its arch and later arcade infilling (Fig. 4). The few courses of the arch that remained showed clearly that the profile consisted of a large torus beneath double archivolts of rectangular section (Fig. 9)³⁰ exactly as in the nave arcade of Bernay in Normandy (1025-1040),³¹ and in the crypts of the Cathedrals of Auxerre (*ca.* 1030) and Nevers (1031).

The capital on the pier was of the Corinthianizing type quite different from the Gothic form in the tribune (Fig. 4) and obviously Romanesque of the eleventh century. Close counterparts exist in the porch of Saint-Benoit-sur-Loire and in the vaulted chamber of the tower at Cormery (Fig. 11).

The outer walls of the tribunes of the transept with their windows seem to be original. The latter are round-headed with no indication of the continuous outlining torus moulding which the drawing carefully records in the Gothic clearstory windows and which also appear in the two openings on the south wall of the Tour Charlemagne (Fig. 4).

The undoubted originality of the tribune wall flanking the inner half of the Tour Charlemagne, where the imprint of the quadrant vault is visible (Fig. 8), reinforces the evidence of the windows. Since no extra aisles were added to the transept necessitating a rebuilding of the outer wall, as was the case in the nave, there would be no reason to replace the wall, notwithstanding the later modification of the tribune vaulting.

With the vestiges of Romanesque fabric distinguished from subsequent alterations, it is possible to restore and date within reasonable limits the parts lost in the Gothic transformation, notably the barrel vaulting which covered the transept nave, its quadrant vault abutment, and the original southern face of the Tour Charlemagne.

THE DATE OF THE TOUR CHARLEMAGNE

Before undertaking the reconstitution of the transept, it is essential to determine the date of the Tour Charlemagne, since its masonry, when examined in relation to the fragments of the transept, sheds considerable light on the sequence of building campaigns in this area of the church. The date of the tower thus serves as the key to the chronology of the transept. Stylistically the first two stages are manifestly of the eleventh century,³² and represent the sole remaining portions of the original tower. The immediate problem is to fix the approximate date in the eleventh century to which these stages belong (Fig. 15).

28. Abbé Plat may have mistakenly endowed the tribune arches with the torus moulding of the transept arcades, since his photograph of the formerly extant transept pier adjacent to the Tour Charlemagne is wrongly labeled "tribune" (*L'art de bâtir*, p. 90 and pl. IV b).

29. Cf. the round tribune arches of Saint-Germer-de-Fly of the early Gothic style.

30. The visual evidence of the pier must take precedence over the wash drawing in determining this form. It is difficult to explain the profile of four torus mouldings appearing in the drawing, unless it is an error on the part of the artist due to the execution of the drawing in the studio from field notes and sketches.

31. See Porée, "L'église abbatiale de Bernay, étude

archéologique," *Congrès archéologique de France, Caen, Paris, 1908* (Part 1), pp. 596-599.

32. Chevalier argued that the two lower stages were Carolingian and sheltered the tomb of Luitgarde, wife of Charlemagne, who died in Tours. This dating is in no way tenable, even though Luitgarde may have been buried in the Carolingian church of Saint-Martin. For a discussion of the reliability of a drawing by Beaumesnil reputed to be of the tomb of Luitgarde, see Stanislas Ratel, "Communication," *Bull. Soc. arch. Touraine*, VII, 1886-1888, pp. 178-182; also "Note sur un croquis de Beauménil indiquant le lieu de la sépulture de Luitgarde, femme de Charlemagne," *ibid.*, pp. 478-488.

The most distinctive feature of the tower is the vaulted chamber of the second stage with its domical vault sustained by heavy ribs rising from engaged columns in the middle of each wall and crossing in the center of the vault (Fig. 6). Concealed from view above the extrados, but detached from it, is a secondary system of ribs introduced for structural reasons.³³ Externally the elevation of the domical vault was indicated on the wall of the tower by a double range of small blind arcades, the lower tier of which was subsequently walled up. This chamber, together with the groin-vaulted ground story and the terminal belfry stage, constituted a tower formula which is recognizable in several examples in Touraine and neighboring regions. A study of this group does much to clarify the original form of the Tour Charlemagne, and provides an indication of its date.

There exist two towers in western France that contain vaulted chambers analogous to that in the Tour Charlemagne but ribless and of more archaic form. On stylistic grounds these vaults may be considered earlier than their more developed counterpart at Tours. The towers are the Tour des Cloches at Marmoutier³⁴ and that of the church of Saint-Genest at Lavardin.³⁵ The latter is well dated between 1032 and 1047.³⁶ Its vault closely resembles that in the Tour des Cloches at Marmoutier. Both rise by means of awkward transitions above a square chamber, the walls of which are relieved with coupled blind arches. The upper portions of the vaults become domical. There are no ribs crossing beneath the vault surface, as in the later Touraine towers. Since it is logical to believe that the tower of Saint-Genest was built by workmen from Marmoutier sent to build Saint-Gildéric and utilized at Saint-Genest, and since the vaults of the two towers are virtually identical, it would seem that the vault in the Tour des Cloches is the prototype,³⁷ followed by that in the tower of Saint-Genest.

Workmen returning to Tours about 1050 doubtless found employment on the Tour Charlemagne where they introduced the device of crossed ribs springing from engaged columns in the middle of the walls of the chamber.³⁸ They retained as wall adornment the paired arches that appear at Saint-Genest and Marmoutier, but they improved the shape of the vault, achieving a form closely approximating the cloister type. The scale and beauty of the Tour Charlemagne encouraged imitation, and close reflections appeared at Cormery in the Tour Saint-Paul (*ca.* 1052) (Fig. 11),³⁹ in the tower of Saint-Ours at Loches, in the

33. The presence of these ribs was unsuspected until the collapse of 1928 brought them to light. They initiated analogous but more developed systems above the vaults in the tower of La Trinité at Vendôme and in the Tour Saint-Aubin at Angers. See Bray, "La Tour Charlemagne," p. 148.

34. Illustrated in Plat, *L'art de bâtir*, pl. vi c.

35. Illustrated in Plat, "Touraine, le berceau des écoles romanes," p. 360.

36. The monks of Saint-Genest, occupying a Merovingian priory belonging to the neighboring abbey of Saint-Georges-du-Bois, sold land for the priory of Saint-Gildéric at Lavardin, a dependency of Marmoutier. Taking advantage of the money at hand, and the presence of workmen at Saint-Gildéric, the monks of Saint-Genest rebuilt their own church. The identical form of certain capitals in the two churches indicates that they are of approximately the same date and by the same workmen. Since Saint-Gildéric was constructed between 1032 and 1047, the tower of Saint-Genest may be assigned to about the same time. See Plat, "Lavardin, l'église Saint-Genest," *Congrès archéologique, Blois, Paris, 1925*, pp. 315, 328.

37. Deshoulières (*Au début de l'art roman*, p. 111) believes

that the vault of the Tour des Cloches should be assigned to a date as late as 1070, but can cite no definite proof. On stylistic grounds this is difficult to accept. A vault of such scale built near Tours as late as 1070 would be very likely to utilize the progressive rib system of the Tour Charlemagne, as was the case at Cormery and Loches.

38. Interest in the association of ribs with traditional vault surfaces was becoming widespread at this time and was preparing the way for the organic vaults of the twelfth century and later. See Élie Lambert's ingenious theory of the origin of such ribbed bays in the vaults of Muslim Spain ("Les voûtes nervées hispano-musulmanes du XI^e siècle et leur influence possible sur l'art chrétien," *Hespéris*, VIII, 1928, pp. 147-175). Cross ribs appear about 1050 in the corner vaults of the four-column church of the Theotokos at Hosios Loukas. In this case, however, the ribs spring from the corners of the bay. The rib vault of the Tour Charlemagne is an important early French experiment in a system which eventually was to make possible the achievement of Gothic architecture.

39. The church was consecrated in 1054. Its abbot was an honorary canon of Saint-Martin at Tours.

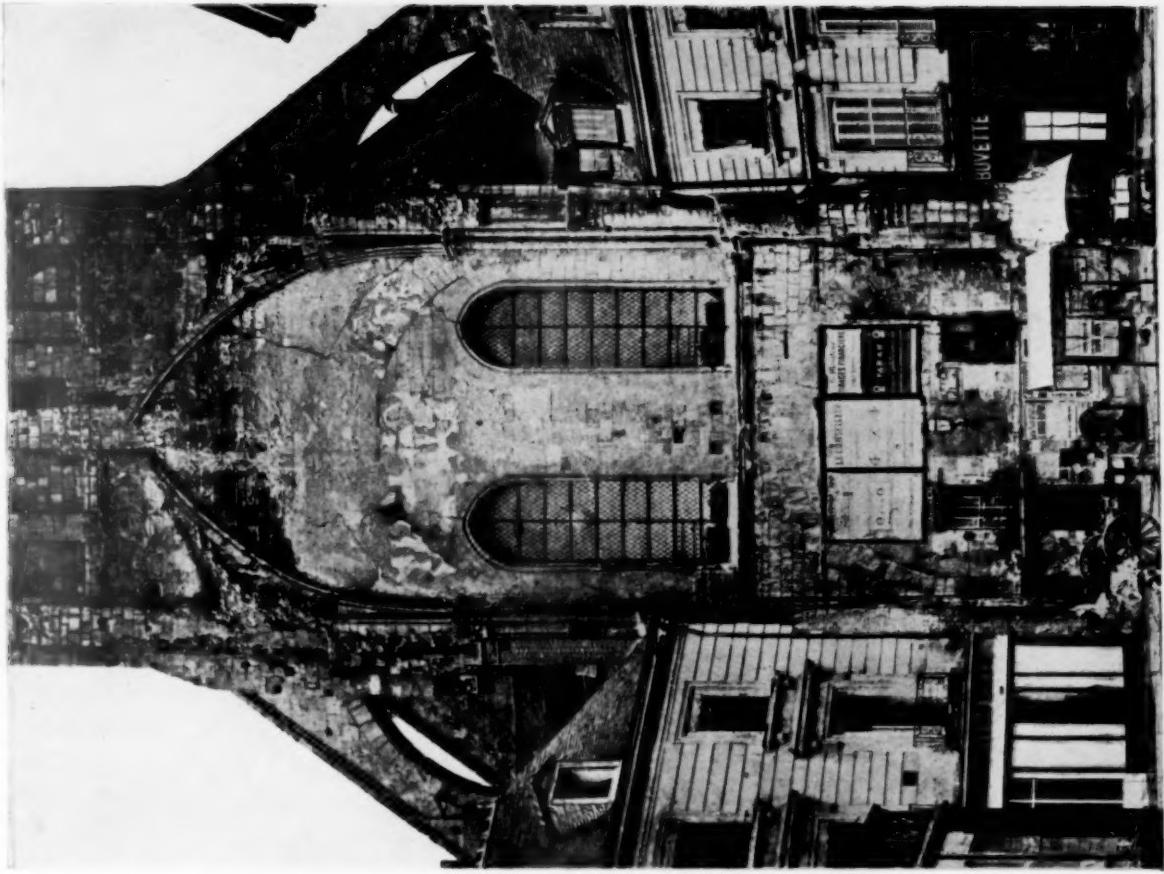


FIG. 4. Detail of South Face

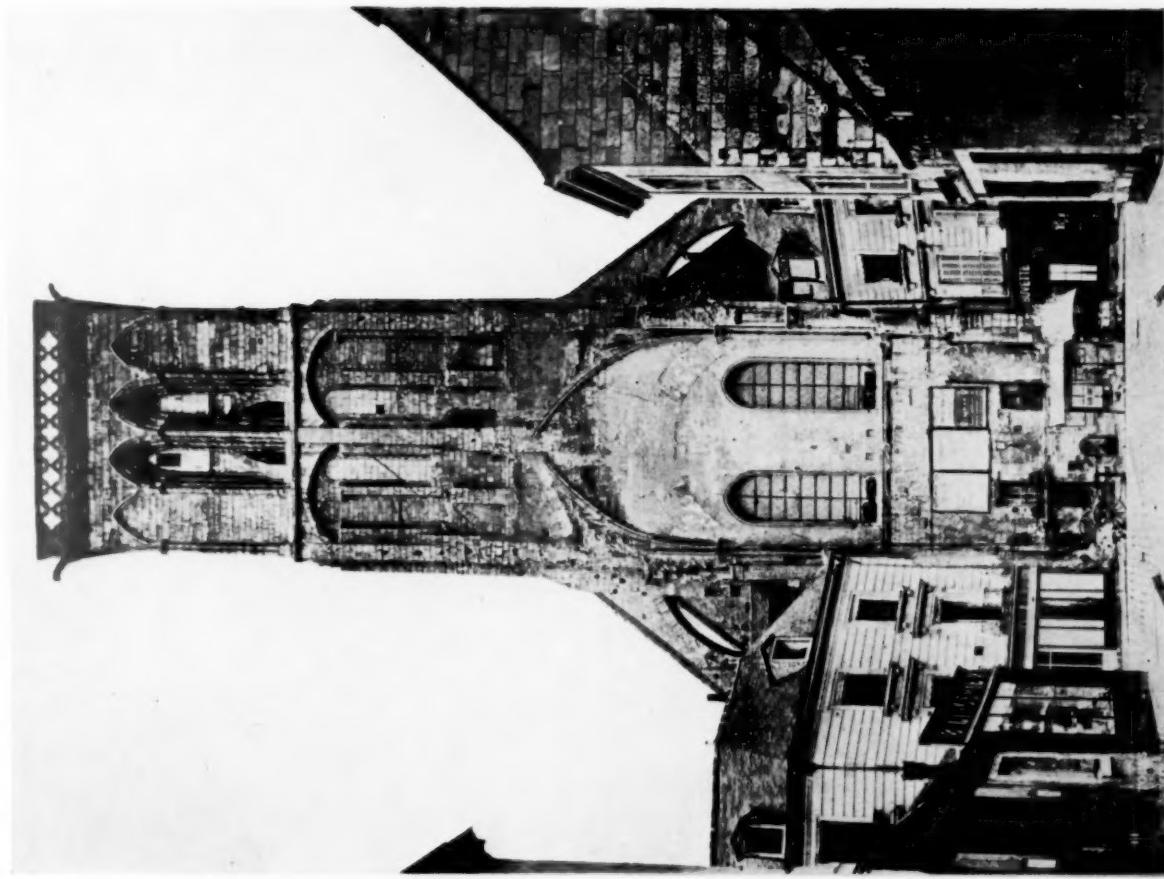


FIG. 3. South Side before Collapse

FIGS. 3-4. TOURS, TOUR CHARLEMAGNE

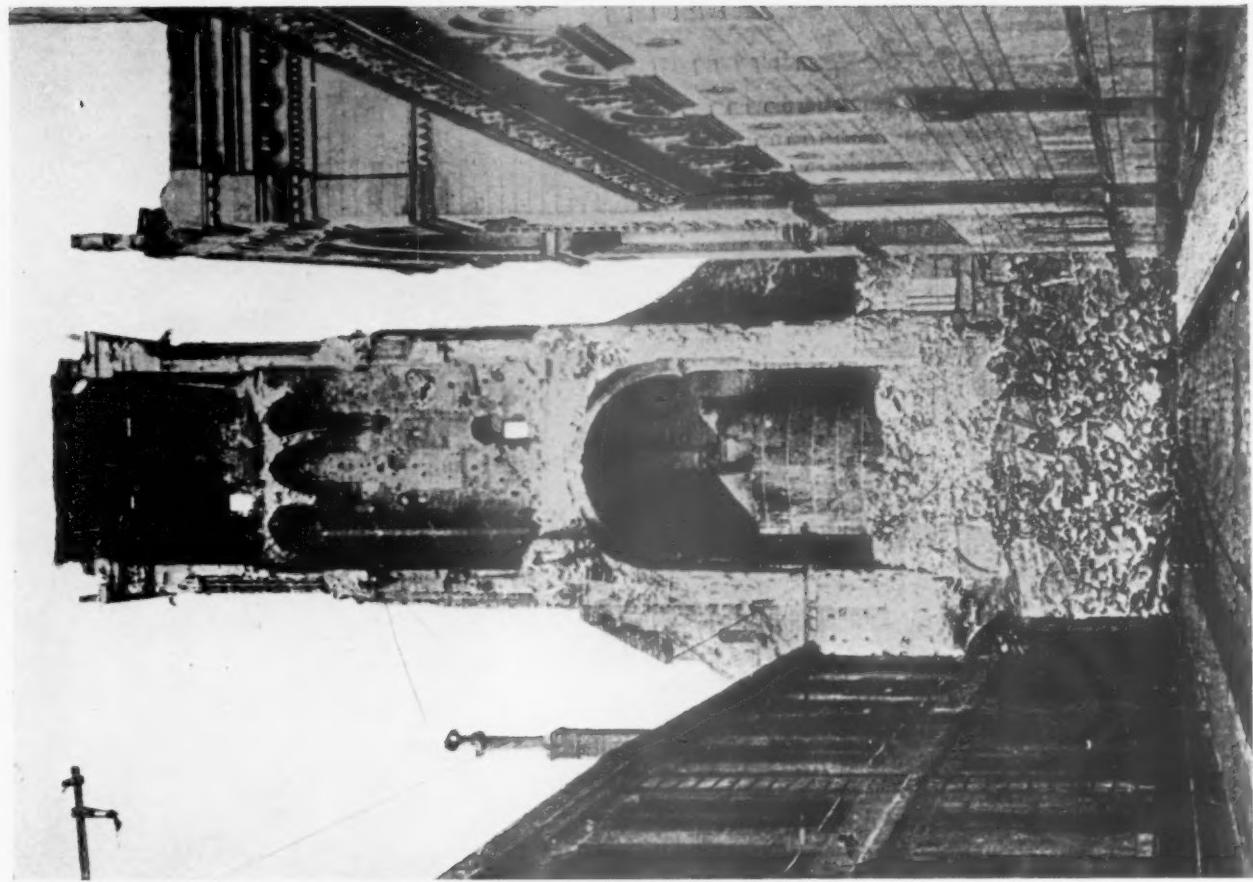


FIG. 6. South Face after Collapse (1928)

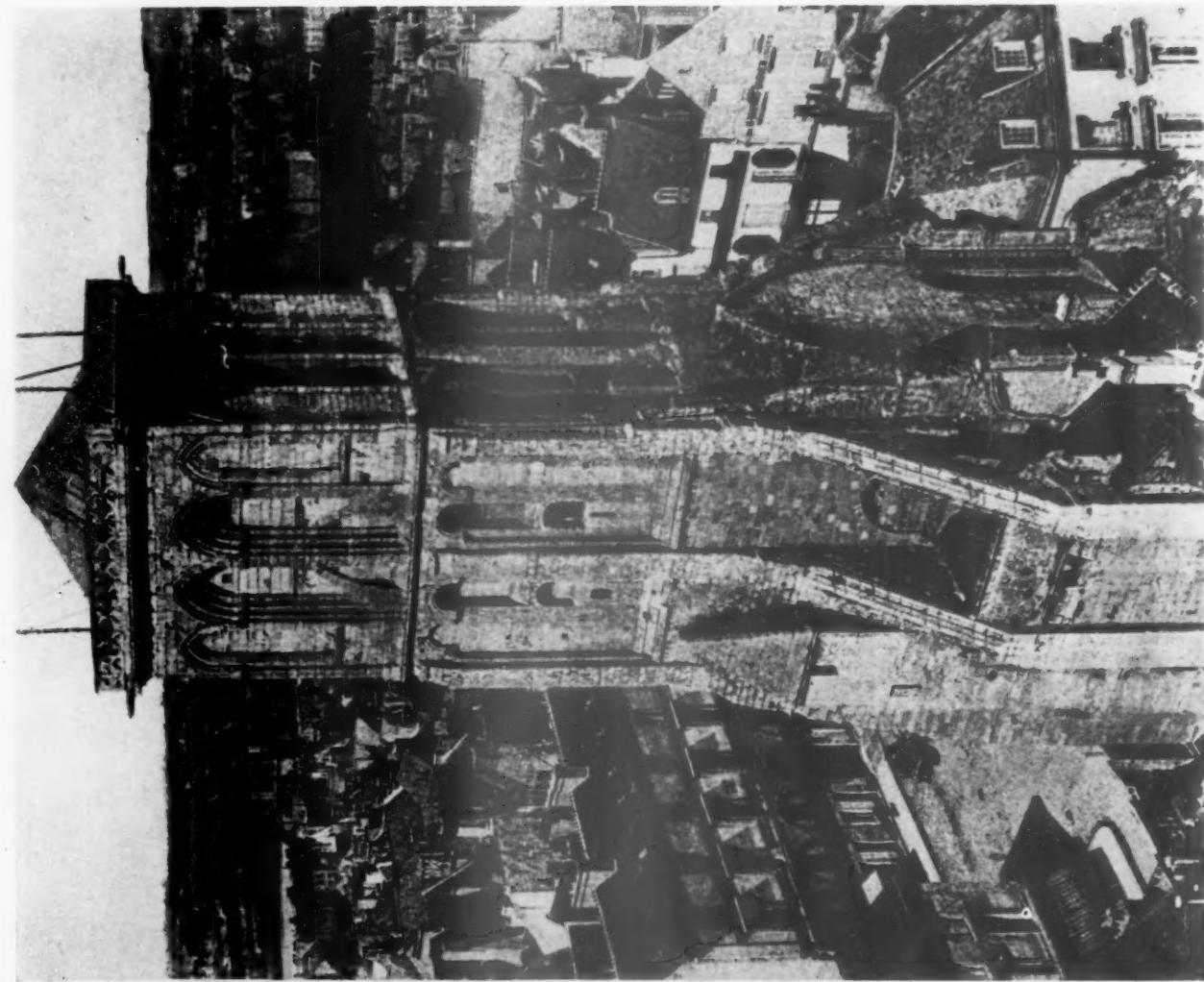


FIG. 5. View from Southwest before Collapse

FIGS. 5-6. TOURS, TOUR CHARLEMAGNE

crossing tower of Aubiac (Lot-et-Garonne), and in the north tower of the Cathedral of Bayeux (*ca.* 1060).⁴⁰

On the basis of the stylistic sequence established by the domical vaults at Marmoutier and Lavardin before the middle of the century and the later more sophisticated expressions at Cormery, Loches, and Bayeux, it would seem that the ribbed domical vault and its external indication came into being about the middle of the century and was disseminated from a common source to smaller churches in the vicinity. The Tour Charlemagne qualifies for this position. It is the largest in scale, and is introduced into a church of conspicuous status where progressiveness would be expected and where radial influences would be active. On stylistic grounds, therefore, the Tour Charlemagne may safely be assigned to about 1050, a date that is further indicated by other factors to be dealt with presently.

THE TOUR CHARLEMAGNE AND ALTERATIONS OF THE TRANSEPT

The construction of the Tour Charlemagne about 1050 along with the corresponding tower at the end of the south transept was accompanied by a partial rebuilding of the transept and presumably of the choir and apse, the former in a new structural formula of great future significance, markedly different from the wooden-roofed church of Hervé. There is no recorded reference to this reconstruction, for it was apparently not motivated by the conflagration that so frequently evoked a rebuilding. It was rather the first step in bringing the great church into line with new constructive advances apparent especially in Touraine in the years just before the middle of the eleventh century. At this time the *collégiale* of Saint-Martin was at its height. Its organization numbered two hundred canons,⁴¹ and it enjoyed tremendous prestige in France. It is not surprising that two generations after the dedication of the basilican church of Hervé the canons decided to sustain the fame of their church by inaugurating a new building program that would introduce into Saint-Martin the latest methods of fireproof vaulting.

The first phase of the campaign was concerned with the parts east of the nave including the Tour Charlemagne, its companion tower, the transept, and probably the upper stages of the choir and apse. The proof of this rebuilding is contained in the masonry of the Tour Charlemagne, particularly as revealed after the crash of 1928, in the contiguous piers which until then stood just south of the tower, in the wash drawing of 1798, and in the recognized precocity of Touraine in the employment of barrel vaulting in the middle of the eleventh century.

The new program retained much of the transept that was planned by Hervé but which was perhaps still incomplete at the time of the consecration in 1014. The groin-vaulted aisles were kept intact. The high tribune with its round-arched openings giving on the nave of the transept, examples of which are visible partly walled up on the eastern and western walls of the Tour Charlemagne (Figs. 5, 7), was also retained, but the primitive wooden roofing was replaced by quadrant vaulting. Traversing the end of each transept arm was an open gallery upheld by two round arches falling upon a central column, the gallery per-

⁴⁰. The same ribbed vault occurs in the Torre Vieja of the Cathedral of Oviedo in Spain, the work of Alfonso VI (Vicente Lampérez y Romea, *Historia de la arquitectura cristiana española en la Edad Media*, Madrid, 1930, I, pp. 438-439. The general form of the Tour Charlemagne inspired the north tower of Saint-Mexme at Chinon, although a barrel vault covers the chamber of the second stage in-

stead of the ribbed domical form at Tours. A range of blind arches marks externally the position of the vault, as in the Tour Charlemagne.

⁴¹. This was later reduced to one hundred fifty in the twelfth century and to fifty in the middle of the thirteenth century. See Busserole, *Dictionnaire*, VI, p. 247.

mitting continuous circulation at the tribune level (Fig. 6).⁴² Double-stage transept chapels from the church of Hervé were left untouched.

Of importance to determine is the date of the transept piers and whether they are the primitive supports planned for this position. In view of the original character of the aisle vaults and the transept end-gallery, it is difficult to see how the piers could be later intrusions. To be sure, the rectangular and cruciform sections were more characteristic of the early eleventh century than the square core with engaged colonnettes on its surfaces, but piers identical to those in the transept of Saint-Martin were used in the church of Saint-Germain-des-Prés in Paris as early as 1005. The form is encountered with increasing frequency as the eleventh century develops, as in Saint-Martial, Limoges (perhaps as early as 1025), the crypts of the cathedrals of Auxerre (*ca.* 1030) and Nevers (1031), and commonly after the middle of the century. Of particular significance are the analogies between the piers of Saint-Martin and those of Auxerre and Nevers where not only is the section the same, but a prominent torus moulding also depends from the soffit of the archivolts.

Another factor reinforcing the attribution of the lower portions of the transept to the early eleventh century is the masonry technique of the engaged columns on the two piers which were extant until 1928.⁴³ The columns and responds are laid up with regular drums alternating with half drums, the latter keyed into the wall.⁴⁴ The reddish mortar joints are conspicuously thick. The analogy between the technique at Saint-Martin and the construction of the exterior columnar buttresses on the Chapel of the Abbots of La Trinité at Vendôme,⁴⁵ dated about 1035, is striking indeed, and provides still further indication of the date of the piers of Saint-Martin. Their bases are represented in the drawing by Masquelez (Fig. 10) as consisting of a torus resting on a pentagonal plinth.

In date the piers are certainly earlier than the Tour Charlemagne, hence are before 1050, as will be shown presently in the analysis of the masonry of the tower. On the basis of analogies with the piers and arches of the crypts of Auxerre and Nevers they can be assigned with conviction to as early as 1030, but in view of the presence of the identical pier-form at Saint-Germain-des-Prés about 1005, and the technical character of the masonry, there seems to be no justifiable reason for not accepting the square-core transept piers of Saint-Martin as a part of the church of Hervé. It is possible, however, that at the consecration in 1014 the church was not entirely completed, and that work continued on the transept with the piers assuming form at the end of the first quarter of the century or a little later.

As at Saint-Germain-des-Prés, the inner colonnette of the piers originally continued up the transept wall to terminate either as a cone or as a support for a cross-beam of the wooden roof. The best graphic source for the appearance of the transept as planned by Hervé is the seventeenth century drawing by Étienne Martellange of the interior of the corresponding transept arm of Sainte-Croix at Orléans, which was contemporary.⁴⁶ At Sainte-Croix the pier was cruciform with a pilaster passing up the wall to the roof level, and there was no

42. Cf. analogous Norman transept galleries at Saint-Étienne and Saint-Nicolas at Caen, Cérisy-la-Forêt, Saint-Georges-de-Boscherville, and in extended form, at Jumièges and Bayeux. In England the gallery occurs in the north transept of the Cathedral of Winchester.

43. De Lasteyrie (*L'église de Saint-Martin de Tours*, pp. 12-13) admits that an early eleventh-century date for the piers is strongly indicated. Mgr. Chevalier included photographs of the remnants of the piers in his *Fouilles de Saint-Martin*, pls. III and IV. He assigned them to the twelfth century, but this date is now seen to be incompatible with the evidence.

44. Plat, *L'art de bâtir*, pp. 78, 79 and note 1.

45. Illustrated by Deshoulières, *Au début de l'art roman*, p. 132. The same technique also occurs at Saint-Aignan at Orléans (after 989) and at Notre-Dame-de-la-Couture at Le Mans (*ca.* 1000).

46. See Eugène Lefèvre-Pontalis and Eugène Jarry, "La cathédrale romane d'Orléans," *Bulletin monumental*, LXVIII, 1904, pp. 309-372. There are three drawings in the series preserved in the Département des Estampes, Bibliothèque Nationale.

gallery at the end of the transept; otherwise the drawing presents a fairly accurate picture of the early eleventh century disposition of the north transept of Saint-Martin before it was modified by the introduction of masonry vaulting.

In the original plans of Hervé, it must be supposed that, except at the crossing, the pier-forms of the transept were uniform. The Jacquemin plan, however, shows two types of a more complicated section adjacent to the crossing. Abbé Plat rightly dates them as mid-eleventh century.⁴⁷ They were apparently introduced at the time vaulting replaced the wooden roof in order to give better support for the heavy crossing lantern that was being prepared for at this time.

The structural transformation of the transept of Saint-Martin about 1050 was one of great import. A barrel vault with a span of over eight meters replaced the former wooden roof, utilizing for the support of its transverse ribs the wall shafts that rose from the existing piers,⁴⁸ except near the crossing where heavier supports were constructed. Provision was made for suitable abutment by the introduction of quadrant vaults over the tribunes in place of the former wooden roofing (Fig. 8).⁴⁹ At the same time, the Tour Charlemagne was grafted on to the end of the transept of Hervé, half within the structure above the transverse gallery, and half in projection beyond the façade (Figs. 5, 15, 17).⁵⁰

The open gallery with its two supporting arches springing from a central column was entirely inadequate for the support of the south face of the tower, and in order to provide the requisite foundation mass, it was reinforced by two opposing quadrant arches, one beneath each gallery arcade, rising from the lateral piers to the abacus level of the central column. Masonry infilling between the new bracing arches and the original arcades consolidated the front of the gallery. At the same time the central column and capital were engulfed in a large pier of square section.⁵¹ To provide abutment at right angles to the face of the tower, the contiguous transept arcades were walled up except for a narrow arched opening in the eastern arch (Fig. 9), the masonry thus functioning in a manner analogous to the conventional buttresses on the other faces of the tower. The walling up of the two transept arcades must have been done at the time of the erection of the tower, or shortly afterwards, for without recourse to this device the base masses of the tower would have been inadequately buttressed toward the south. The fact that the piers and arches of the transept arcade existed to be walled up shows that the pier system antedates the tower of 1050 and must therefore belong to the church of Hervé.

The weight of the tower and particularly the lateral pressure of the ribbed domical vault of the second stage were the two chief dangers to be met. The south tower wall itself was inherently inadequate to meet these pressures, but from the first received reinforcement

47. *Op. cit.*, p. 78.

48. The upper portions of the original shafts had to be cut down to accommodate the lower spring level of the new transverse ribs, just as was done at Saint-Étienne and La Trinité at Caen in the following century when vaults were introduced into naves that were previously covered with wooden roofs.

49. While quadrant vaults were not common in France at this date, they had been used perhaps as early as the end of the tenth century in the chapel of the narthex of Saint-Philibert at Tournus. Most significant is the still unpublished discovery of Miss Alice Sunderland of Cambridge, Massachusetts, that by 1017 quadrant vaults had been constructed in the choir tribunes of Saint-Bénigne at Dijon to buttress the barrel vaulting of the choir. Similar vaulting also occurred in the gallery of the rotunda. Quadrant vaults dating from the middle of the eleventh century characterize

several churches of the First Romanesque style such as Arles-de-Tech (1046) and Elna (consecrated 1069). See Puig i Cadafalch, *Le premier art roman*, Paris, 1928, pp. 76-77.

50. In the prototype tower of Saint-Genest at Lavardin and probably in that of Saint-Gildéric the aisles extended on each side of the façade tower, and in the former the north aisle was barrel-vaulted to furnish abutment for the tower. The Tour Charlemagne reveals this device in part, being flanked for half its depth by the transept aisles and the quadrant vaulting of the tribunes above, but reserving half its mass for an external tower-porch.

51. The original arcades of the gallery, the strengthening arches, and the central pier were revealed when the southern half of the tower collapsed. For a detailed discussion of the revelations of the crash, see Bray, "La Tour Charlemagne," pp. 141-151.

from the suitably consolidated walls of the transept,⁵² and especially from the barrel vaulting that was introduced when the Tour Charlemagne was built. These measures proved insufficient, however, because of the instability of the foundation soil and the careless construction of the tower.⁵³

Shortly after the walling-up of the arcades, still further strengthening of the south face became necessary at the critical foundation level and at the spring and haunch areas of the ribbed vault. On the ground stage a huge arch of considerable salience, consisting of a double range of voussoirs and surmounted by spandrel walls rising to the floor level of the vaulted chamber, was constructed in front of the former transverse gallery, masking its original plane and virtually doubling the thickness of the ground-story wall of the tower (Fig. 4). Beneath the great arch, which was placed higher than the earlier quadrant arches, a massive pier was built directly in front of the earlier one that contained within its masonry the original supporting column of the transverse gallery.

This refacing arch and its spandrel walls projected into the transept and encroached on the infilling of the contiguous arcade at each side, reducing the arch to a little over one-half its original width and overlapping the northernmost voussoirs of the narrow arched passage (Fig. 9). The similarity between the masonry of the newly erected spandrel walls above the great arch and that of the infilling of the transept arcades indicates that no great lapse of time separated the two campaigns of consolidation.⁵⁴ At the time of these efforts to strengthen the base of the southern wall, other revetments were introduced within the tower beneath the lateral arches of the first and second stages and beneath the transverse ribs of the contiguous aisles, thus reducing the original arches to narrow passageways (Figs. 12, 14).

The second danger point at the level of the ribbed domical vault of the tower was also strengthened at the time the loaded revetment-arch was introduced below. Just beneath the point where the barrel vaulting of the transept butted the south wall of the Tour Charlemagne, directly above the front plane of the original transverse gallery, another great arch of double voussoirs, analogous in form and function to the one below, was erected (Fig. 4),⁵⁵ and contact with the vault surface was effected by loading.⁵⁶ The arch was sufficiently salient to project into the transept to the advanced plane established by the strengthening arch below. The wall of the tower between this upper arch and the floor level of the vaulted chamber was not at this time brought forward, as was done later, but was left in its original plane, probably to permit the retention of the two Romanesque windows. Not until the appearance of Gothic vaults in the twelfth century was a refacing wall introduced into this area to bring the entire southern face of the tower beneath the vaults into a uniform plane (Fig. 5).

Study of the masonry is also of help in determining the date of the main transept vault. With the thin unbuttressed south wall of the Tour Charlemagne lacking specific devices within itself to resist the powerful lateral pressure of the ribbed domical vault posed high in the second stage, a deficiency in marked contrast with the other sides where conventional

52. Probably the tribune arches contiguous to the tower were also filled up, as were the arcades below.

53. For an account of the structural weaknesses of the tower, see Bray, *op. cit.*, pp. 151 ff.

54. At some later time the space beneath the great arch and the trumeau-like pier was reduced to two roundheaded passages by the introduction of a thin wall of conglomerate material. These show clearly in the wash drawing (Fig. 2). The passage arches of the walled-up transept arcades were

also eventually filled up with crude infilling (Fig. 9), probably after the destruction of the church, to furnish much needed abutment for the base of the tower after it was weakened by the loss of the transept walls and barrel vault.

55. Cf. the great arches which buttress the pendentives on the north and south at Hagia Sophia.

56. Cf. the identical system of loading above the eastern transverse arch in the nave of Saint-Savinien at Sens (*ca.* 1070) (Ill. Deshoulières, *Au début de l'art roman*, p. 102).

buttresses appear, it is obvious that the builders were depending partly on the reinforced walls of the transept for this abutment, but mostly on the newly introduced barrel vaulting which functioned at this point as a substitute for a medial buttress. By its adjustment precisely the required mass at the spring of the tower vault was provided, without which its thrusts would have been inadequately opposed. That this was considered one of the critical areas of the tower is proved by the subsequent addition at this point of the revetment arch of double voussoirs. The barrel vaulting, therefore, may be logically assigned to the same date as the Tour Charlemagne on the basis of the necessity of its existence for the maintenance of the stability of the south face.⁵⁷ It may also be reasoned that the impracticability of cutting out the thin south wall of the Tour Charlemagne to permit the subsequent letting in of the barrel vault is further indication that the latter does not postdate the Tour Charlemagne. Rather, the tower is contemporary with the barrel vaulting and its quadrant vault abutment, and is dependent on them (Fig. 17.)

In summary, the evidence of the masonry not only reveals the sequence of consolidations which were undertaken to insure the stability of the tower, grafted as it was in a strangely careless fashion on to pre-existing constructions above a terrain that was notably unstable, but it also clarifies the major steps in the evolution of the transept area. By proving that the piers antedate the tower, it relates them to the church of Hervé, and by demonstrating the vital rôle of the main transept vaulting in maintaining the stability of the tower, it implies that the barrel vault is contemporary with the Tour Charlemagne.

The same conclusions as to date can be arrived at, not only on the basis of structural logic, but also on the evidence of tendencies toward the adoption of such vaulting that are especially prevalent in Touraine in the second quarter of the eleventh century.

As Professor Conant has pointed out,⁵⁸ a new and more sophisticated series of barrel-vaulted churches came into being in France about 1050 to take the place of the conservative wooden-trussed Capetian basilicas of the type of Saint-Remi at Reims, the Cathedral of Orléans, Notre-Dame-de-la-Couture at Le Mans, Bishop Fulbert's Chartres, and undoubtedly Hervé's church of Saint-Martin at Tours. The middle and third quarter of the century constituted the preparatory period for the outburst of Romanesque building which characterizes the last third of the eleventh century and which is so magnificently illustrated by Santiago de Compostela, Saint-Sernin at Toulouse, and Cluny III. The immediate prototypes for the French vaulted structures have not been clearly worked out. It now appears that the establishment of the date of the transept of Saint-Martin as approximately 1050 contributes much to an understanding of subsequent architectural developments. It is logical to believe that the reconstruction of the transept and probably the choir of Saint-Martin, one of the largest and most influential of all French churches, was a part of the preparatory phase of structural progress that led to the brilliant achievements of the latter part of the century. The reasonableness of this supposition lies not only in the perfect structural relationship effected at Saint-Martin between barrel vault and its abutment, but also in the precocity of Touraine in the adoption of barrel vaulting as a mode of fire-proof roofing.

Appearing sporadically in the tenth and early eleventh centuries,⁵⁹ the barrel vault found

57. Events subsequent to the destruction of the church, culminating in the partial collapse of the Tour Charlemagne, demonstrate dramatically the dependence placed by the mediaeval builders on the walls and vaulting of the transept to insure the stability of the tower.

58. *The Early Architectural History of the Cathedral of*

Santiago de Compostela, Cambridge, 1926, pp. 13-14.

59. Professor Conant (*A Brief Commentary on Early Mediaeval Church Architecture*, Baltimore, 1942, pp. 25-27) stresses the importance of Burgundy in the early development of barrel-vaulted naves. Examples include Charlieu (vaulted ca. 960-980?), Cluny II (ca. 955-981), and St. Bé-

favor in Touraine before the middle of the eleventh century.⁶⁰ The narthex of Saint-Mexme at Chinon was covered about 1030 with a barrel vault over seven meters wide supported on three heavy transverse arches.⁶¹ At Saint-Genest at Lavardin the porch and the choir were covered with similar vaults about 1040.⁶² The choir vaulting of seven meters' span was buttressed by barrel vaulting in the aisles, the formula later to be associated with so much of southern and southwestern France. At Saint-Gildéric at Lavardin (1032-1047), both nave and transepts were barrel-vaulted, the former on transverse ribs with the surprising span of ten meters and height of nine and one-half meters.⁶³ Saint-Étienne-de-Beaugency possesses a barrel vault likewise on transverse ribs that may be as early as 1045.⁶⁴ Finally, Beaulieu-les-Loches, begun as a wooden-roofed, hall-type basilica by Foulques Nerra in 1002, was subdivided into a barrel-vaulted nave and side aisles in the third quarter of the century.⁶⁵ Culminating this experimental period, the barrel-vaulted nave with various types of abutment became the accepted system in the majority of Romanesque churches in France and countries under the influence of France for fireproofing the naves and transepts.

In view of the place of Touraine in the early development of the barrel vault, it would be extraordinary indeed if the most conspicuous church of the region and one of the most notable in all France should not alter its archaic form in favor of the benefits of a new constructive system which had shown increasing regional popularity just before the middle of the eleventh century. The span of the transept vault of over eight meters, when compared with those of over seven meters at Saint-Mexme-de-Chinon and ten meters at Saint-Gildéric at Lavardin, is of a width readily managed in view of what had already been accomplished.

It is thus evident both from the masonry of the Tour Charlemagne and from the growing popularity of barrel vaulting in Touraine just before the middle of the eleventh century that the reconstructed transept of Saint-Martin may with conviction be dated in the vicinity of 1050.⁶⁶ Although occupying at first only a part of the great church, the vault and its abutment represented a synthesis of what had been experimentally accomplished hitherto and established a constructional formula so completely logical within the limits of Romanesque architecture that within fifteen or twenty years it was to be adopted by the great churches of the Pilgrimage Roads.

THE TRANSEPT OF SAINT-MARTIN AND THE PILGRIMAGE CHURCHES

Professor Porter, in his search for the origins of the formula of the Pilgrimage churches that was so effectively realized at Santiago and Toulouse, found Saint-Étienne at Nevers

nigne at Dijon (1001-1018), where a vault was planned, perhaps not fully executed. Other early vaults appear at Ris in the Auvergne (992-994), in the narthex chapel of Saint-Philibert at Tournus (*ca.* 950 or 960-*ca.* 1019), Saint-Martin-du-Canigou (begun 1001), and in Catalonian examples of the First Romanesque style. See H. and E. Ranquet "Origine française du berceau roman," *Bulletin monumental* xc, 1931, pp. 35-74; Puig i Cadafalch, *op. cit.*, pp. 60 ff.

60. For a discussion of tenth-century examples of barrel vaulting in Touraine, see Plat, *L'art de bâtiir*, pp. 104-105.

61. *Ibid.*, pp. 105, 131, note 2.

62. Plat, "Lavardin," *Congrès archéologique, Blois*, Paris, 1925, pp. 315-343.

63. *Ibid.*, p. 346. These vaults have disappeared, but are described in five *procès-verbaux* of the seventeenth and eighteenth century (Archives de Loire-et-Cher, *laisse 16 h 83*, published by Abbé Metais in *Cartulaire blesois de Marmoutier*, pp. 423-428).

64. Deshoulières, "Saint-Étienne de Beaugency," *Congrès archéologique, Orléans*, Paris, 1930, p. 333. Plat (*op. cit.*, p. 348, note 1) assigns it to the third quarter of the eleventh century.

65. Abbé Plat believes that the same atelier that erected the transept vaulting at Saint-Martin also built the barrel vaults at Beaulieu-les-Loches (*L'art de bâtiir*, p. 106).

66. The structural innovation of barrel vaulting at Saint-Martin must have taken place during the deanship of Gauffridus I. He is mentioned as treasurer in 1044 and as dean in 1052. Since Josbertus was dean in 1040 and Gauffridus I was still treasurer in 1044, the latter must have become dean after 1044 and was still in office in 1052. Radulfus is the next dean, but is not mentioned until 1064-1070. Gauffridus is the only official of this period who is mentioned as treasurer and then dean. See Nobilleau, *La collégiale de Saint-Martin*, pp. 440-441.

to be the most logical prototype.⁶⁷ Since Professor Porter wrote on the subject, however, Saint-Étienne has been found to be later than first suspected,⁶⁸ not having been begun until after the complete formula had been achieved.⁶⁹ Professor Porter rightly disagreed with those authorities who sought to trace the Pilgrimage system to the church of Saint-Martin built by Hervé between 997 and 1014,⁷⁰ pointing out that this view would imply the existence of a barrel-vaulted church buttressed by quadrant-vaulted tribunes nearly a century earlier than Santiago and Saint-Sernin and that there are no reflections of such advanced construction at so early a date, as would likely be the case had it existed.⁷¹ He argued that the Pilgrimage formula was not adopted at Saint-Martin until after the fire of 1096, or more probably until after the fire of 1122 in the flush of enthusiasm for the successful system of vaulting realized at Compostela and Toulouse and adopted freely in radial structures along the Pilgrimage Roads.⁷² Professor Porter based his belief on the reference to the church of Saint-Martin in the Pilgrims' Guide of the *Codex Calixtinus*: "Super quem ingens basilica veneranda sub ejus honore ad similitudinem scilicet ecclesie beati Jacobi miro opere fabricatur."⁷³

This passage, written by Aymery Picaud about 1139 or a little later after a visit to Santiago between 1122 and 1135,⁷⁴ implies that Saint-Martin was built in imitation of Santiago, according to the interpretation given to it by Professor Porter⁷⁵ and Sr. Gómez-Moreno.⁷⁶ Gaillard does not believe that the reference need be so interpreted,⁷⁷ maintaining that the passage does not mean as in classical Latin that the church was built "on the model of" Santiago, but rather that a church has been built that "resembles" Santiago.⁷⁸ The fact is, "ad similitudinem" in certain circumstances in mediaeval Latin can be given either connotation, and the passage, therefore, is not conclusive as evidence. It does seem to indicate, however, that the Pilgrimage system of construction had been extended throughout a substantial part of the church by the time Picaud saw it, an inference which is borne out by internal evidence, as will presently be shown. The twelfth century campaign of vaulting the nave of Saint-Martin would be definitely later than the beginning of Santiago, and it could be to this recent work that he refers in making his comparison with the Spanish church. Whatever the translation of the passage, to a man writing about 1139 the reconstruction of the transept of Saint-Martin in the middle of the preceding century would be before his memory, and he would probably be in a position to observe only the general analogies between the two structures as he saw them in the early twelfth century.

It must be remembered that at the time Professor Porter wrote on the Pilgrimage School he did not have at his disposal the revelations of the Tour Charlemagne following the crash

67. "Compostela, Bari and Romanesque Architecture," *Art Studies*, I, 1923, pp. 17-19.

68. According to the unpublished researches of Miss Julia Sabine of the Newark Public Library, Saint-Étienne at Nevers was not actively under way until after 1082 and was finished with its three towers by 1097. The presence of a pronounced clearstory between the crown of the quadrant vault of the tribune and the spring of the nave barrel vaulting shows progress in the illumination of the church, but it is achieved at the expense of the fine structural logic that governs the adjustment of the main vault to its abutment in the Pilgrimage churches.

69. Santiago was designed about 1075, and Saint-Sernin about the same time or perhaps a little earlier.

70. For example, Émile Mâle in *L'art religieux du XII^e siècle en France*, Paris, 1924, pp. 298-301.

71. See "Spain or Toulouse? and Other Questions," *ART BULLETIN*, VII, 1924, p. 17, and *Spanish Romanesque Sculp-*

ture, New York, ca. 1928, I, p. 47.

72. As at Conques, Figeac, Marcillac, and Saint-Gaudens.

73. Jeanne Vielliard, *Le guide du pèlerin de Saint-Jacques de Compostelle*, Macon, 1938, p. 60.

74. For the problem of its date, see Conant, *Santiago*, p. 23 and note 1.

75. *Romanesque Sculpture of the Pilgrimage Roads*, Boston, 1923, I, p. 193, note 1.

76. *El arte románico español; esquema de un libro*, Madrid, 1934, p. 117.

77. "Les commencements de l'art roman en Espagne," *Bulletin hispanique*, XXXVII, 1935, pp. 300-301.

78. Gaillard finds it difficult to believe that a church entirely rebuilt in the Pilgrimage formula as late as 1122 would not leave some definitive trace in the foundations, and since none is evident, the fire of that date must have necessitated only a restoration, not a reconstruction.

of 1928, and that Saint-Martin was known to him mainly through the contradictory analyses of the excavations of the chevet in the 1880's, excavations which revealed chiefly foundation walls which he believed to be incapable of clear interpretation. Professor Porter also seems to have had no inkling of a rebuilding of the transept about 1050, since there is no mention of the event in the documents.

Now that Saint-Étienne at Nevers no longer can qualify as a prototype, and a significant reconstruction can be proved to have taken place at Saint-Martin at exactly the time when the evolution of the Pilgrimage formula must have been under way, the position of the transept in the development of this notable system of construction may be appropriately and profitably re-examined, this time on a sounder archaeological basis than before. The lack of specific knowledge concerning the church of Saint-Martin at Tours has been the chief obstacle to the solution of the problem.

It must be admitted that the constructive and aesthetic achievement of both Santiago and Toulouse is so great as to imply the existence of prototypes which must be French.⁷⁹ It now appears that the reconstructed transept of Saint-Martin qualifies as the prototype on the basis of the following reasons:

1. The transept of Saint-Martin dates from precisely the time when one would expect the first completely systematized vaulted structure to appear, drawing together the sporadic experiments in barrel vaulting made prior to the middle of the eleventh century into a rational formula of vaulted ceiling sustained by logical abutments and properly articulated support. It comes at the moment when the wooden-roofed Capetian basilica was giving way to the advantages of the fireproof vaulted nave. Santiago, begun in 1078 and termed by Professor Porter ahead of its time in its structural relationships,⁸⁰ is now seen to be not the inexplicable prodigy of unknown parentage, suddenly complete in its adjustments, but actually a quarter of a century later than its prototype, and consequently normal in its perfection of a formula evolved earlier by a process of grafting the new on the old.

2. The transept of Saint-Martin displays the logical structural adjustment of ribbed barrel vaulting with quadrant vaults in the triforium gallery for abutment and piers of square core with engaged colonnettes, that characterizes the Pilgrimage formula.⁸¹

3. The transept system of Saint-Martin reveals precisely the irregularities to be expected in a prototype form. The piers were of two types, exclusive of those of the crossing, and there is no proof that the tribune arches were ever subdivided into twin arches by coupled columns, as in the Pilgrimage formula. Nor were the bays of quadrant vaulting separated by diaphragm arches in the triforium gallery; rather they were quadrant in shape like those at Saint-Étienne at Caen.

4. Saint-Martin in the early tenth century evolved the first completely rationalized ambulatory and radiating absidiole adjustment and, as rebuilt by Hervé, disseminated the form among the basilicas of the early eleventh century. The apse, perhaps provided with clearstory windows for the first time, was associated with the reconstructed transept of

79. The ambulatory is definitely not a Spanish form and there is nothing in Spanish Romanesque architecture to justify the belief that the components of the Pilgrimage formula can be sought in that country, least of all in Galicia. The history of Spain and the architectural movements of the eleventh century indicate the focusing of French influences at Santiago. It is possible that these factors may have been first combined into the complete structural and

aesthetic unity of the Pilgrimage style on Spanish soil, as Professor Porter believed likely.

80. *Art Studies*, I, 1923, p. 17.

81. This form of pier was adopted at Saint-Martial, Santiago, and Conques. In the nave of the latter, both square-core and cruciform types occur alternately as if in conscious imitation of those of Santiago and Saint-Sernin.

1050 and, along with the vaulting system, could have served as the source for the admittedly French chevet organization at Santiago and Saint-Sernin.

5. Finally, Saint-Martin was a great church of the Pilgrimage Roads, enjoying enormous prestige, and with a brilliant history dating back to Merovingian times. It was therefore in a position to exert architectural influence in any new developments which might take place in the evolution of its own fabric.

The clarification of the form and date of the transept of Saint-Martin thus contributes much to an understanding of the origin of the Pilgrimage style and permits Saint-Martin to take its rightful place in the evolution. The implications raised by the establishment of the transept as the prototype of the Pilgrimage system are too extensive to be examined in detail here. The lack of accurate knowledge concerning the beginning of Saint-Sernin and the date when the Pilgrimage system was introduced at Saint-Martial at Limoges and Sainte-Foi at Conques requires more investigation, but the clarification of the position of Saint-Martin puts further study of the problem on a firmer basis than ever before.

It may be conjectured that the influence of the new structural system of Saint-Martin passing southward was first adopted at Saint-Martial at Limoges soon after 1063.⁸² If, indeed, Saint-Sernin at Toulouse is as early in its beginnings as some French authorities insist,⁸³ then this great church likewise adopted the system at about the same time. Proof of its dependence on Saint-Martin as respects twelfth century work in the nave will be demonstrated presently. Santiago, begun in 1078,⁸⁴ carried the formula to its aesthetic culmination. Sainte-Foi at Conques with its pier system a curious alternation of the types of Santiago and Saint-Sernin seems to have incorporated the Pilgrimage system into its earlier fabric sufficiently late to reflect the influence of the two larger structures.⁸⁵

THE TRANSEPT OF HERVÉ

With the mid-eleventh century form of the transept established, it becomes possible to deduce the general dispositions of its earlier inorganic state as built by Hervé after the fire of 997. Sufficient components of the church may be recognized to assure a fairly complete idea of its form.

Following the partial collapse of the Tour Charlemagne in 1928 the coupled arches supporting the open gallery at the end of the transept were revealed, proving its existence before the erection of the tower (Fig. 6). The gallery may therefore be assigned to the basilica

82. Begun as a wooden-roofed basilica about 1017 by Abbé Geoffry II, the chevet was consecrated in 1028 by his successor Abbé Odolric. The church was burned in 1053, taken over by the Cluniacs in 1062, and rebuilt during the rule of Abbé Adémar (1063-1114), probably with the new fire-proof barrel vaulting buttressed by quadrant vaults inspired by the transept of Saint-Martin. Nearing completion in this form, it was dedicated in 1095 by Pope Urban II. Except for its tower, Saint-Martial was in no way a development of local Limousin architecture. Like Saint-Sernin and Santiago in their respective regions it was not indigenous, but rather a product of the inter-regional flow of influences along the Pilgrimage Roads. Its scale, aisled transepts, pier-forms, ambulatory with five absidioles, as well as its system of vaulting, all indicate the inspiration of Saint-Martin. See Charles de Lasteury, *L'abbaye de Saint-Martial de Limoges*, Paris, 1901, and André Rostand, "Un dessin inédit de Saint-Martial de Limoges," *Bulletin monumental*, LXXXIII, 1924, pp. 172-175.

83. Marcel Aubert, *L'église Saint-Sernin de Toulouse*,

Paris, 1933, pp. 6-7.

84. Conant, *Santiago*, p. 18.

85. The church was begun by Abbé Odolric (ruled ca. 1030-1065). Abbé Bégon III (ruled 1087-1095 and 1097-1107) built the cloister of which fragments still exist. Professor Porter maintains (*Romanesque Sculpture of the Pilgrimage Roads*, I, pp. 233-234) that the present church was grafted on to earlier parts soon after the death of Bégon in 1107, as is indicated by the masonry of the south transept which is built around the previously existing cloister. Furthermore, the earliest capitals, which are at the east end of the church, are evidently slightly later than those now existing in the cloister. The pendentive angels are dated by Professor Porter as no later than 1115 with the choir in construction at about this time and the façade about 1130-1135. Charles de Lasteyrie (*op. cit.*, p. 316) is in agreement with this twelfth century date, which harmonizes with what has been said concerning the alternation of the pier-forms that reflect those of Santiago and Saint-Sernin.

of Hervé.⁸⁶ The tribune arches opening onto the gallery were partially walled up when the tower was built, but the voussoirs of one arch can still be discerned in the western wall of the second stage (Fig. 7). Before the collapse a portion of the tribune arch contiguous to it on the west side was also visible (Fig. 5).⁸⁷

The double-stage transept chapel east of the Tour Charlemagne with access both from the east aisle and from the tribune above was also revealed by the crash. It is probable that this feature, too, was a part of the eleventh-century church of Hervé, although no parallel form of such an early date can be cited. The earliest seem to be those formerly at Saint-Remi at Reims (1040-1049). They become common in the second half of the eleventh century in the Norman school.⁸⁸ The capitals in the upper stage of the chapel⁸⁹ are undoubtedly eleventh century in date, and their simplicity suggests the early part. Although they are less richly foliated than the capital formerly extant on the ruined transept pier next to the Tour Charlemagne (Fig. 9), the presence of reddish cement in both places suggests a homogeneity of construction. The analogous capital in the upper chapel of the Tour aux Clercs at Saint-Ouen at Rouen surely dates from the second half of the century and shows in the character of the foliate collar precisely the advance over the form in Saint-Martin that would be expected half a century later. The entrance arch of the upper chapel at Saint-Martin is decorated with a torus moulding mitered into the masonry instead of cut from the same stone.⁹⁰ The moulding invites comparison with the torus on the transept arcades and is therefore not at variance with the style of the early eleventh century.

The piers have been shown to be of early eleventh-century date. A convincing argument for the homogeneity of the piers, arches, and double-stage transept chapels is the reddish cement used throughout these parts of the church. Grayish cement, on the other hand, is used in the Tour Charlemagne in all stages, a strong indication in itself of different date.⁹¹ The transverse gallery incorporated within the tower is clear indication that the latter was added to the earlier transept; the masonry shows that the contiguous transept arcades were

86. The open transverse gallery occurred at Saint-Remi at Reims (1039-1045) where vestiges can be seen walled up in the north transept, and perhaps at Saint-Solenne at Blois. The gallery became common in Normandy a little later where it occurs at the ends of the transepts of Saint-Étienne and Saint-Nicolas at Caen, Cérisy-la-Forêt, Saint-Taurin, Évreux, Saint-Ouen at Rouen, Saint-Georges-de-Boscherville, and the Cathedral of Winchester in England (begun 1079). At Jumièges and Bayeux the gallery extended over the whole transept arm up to the crossing. A gallery of single-bay depth appears at Saint-Genou (Indre), and at Preuilly, both perhaps reflecting the early gallery at Saint-Martin. The form passed into the Pilgrimage style where it was extended to include the tribune arches above, as at Santiago de Compostela and Saint-Sernin at Toulouse. There is evidence that it was also planned at Conques, but it was never constructed.

87. Tribune galleries appeared as early as the second century in basilican synagogues. They were introduced into Early Christian basilicas where they were utilized as a means of access to the church when the nave floor was excavated below the ground level. Tribunes were usually absent in basilican churches of the Carolingian age, but were later reintroduced. They occurred as early as about 832 in the ancient Cathedral of Le Mans, and about 930 in Saint-Pierre at Jumièges. Tribunes are common features in the late tenth and eleventh centuries, appearing in Sainte-Croix at Orléans sometime after 989, in Notre-Dame-de-la-Couture at Le Mans about 1000, La Trinité at Vendôme (ca. 1035-1040), Saint-Remi at Reims (ca. 1040), Saint-Bénigne at Dijon (1001-1018), and Jumièges (1040-1067).

Floorless "tribunes" appear at Vignory (ca. 1045), and originally at Montierender (ca. 990). There is evidence that wooden floors were used in the galleries flanking the nave of Saint-Remi at Reims. Early tribunes were normally covered with wooden roofs.

88. Double-stage transept chapels occur at Cérisy-la-Forêt, originally at Saint-Étienne at Caen, Saint-Vigor near Bayeux, now destroyed, and in Saint-Ouen at Rouen (Tour aux Clercs, after 1056). This is not the place to investigate the challenging problem of the relationship between the church of Saint-Martin and Norman Romanesque architecture. It should be noted, however, that such features specifically associated with the Norman formula as transept end-galleries, double-stage transept chapels, and tribunes appeared at Saint-Martin early in the eleventh century before they had become established in Normandy. Both internal evidence and chronology suggest that Touraine radiated its influences northwards as well as southwards.

89. Illustrated by Plat, *L'art de bâtir*, p. 154.

90. Plat, *op. cit.*, p. 140.

91. The presence of reddish cement has been noted by Chevalier, *Les fouilles*, p. 119, Palustre, "Séance de 30 novembre, 1887," *Bull. Soc. arch. Touraine*, VII, 1886-1888, p. 308, and Plat, *ibid.*, p. 140, fig. 18. Palustre observes that if the third stage of the Tour Charlemagne, surely of the twelfth century, and the transept pier-system were contemporary, the discrepancy in the color of the cement would not occur. This in itself is an argument against the twelfth-century date to which Chevalier assigned the piers.

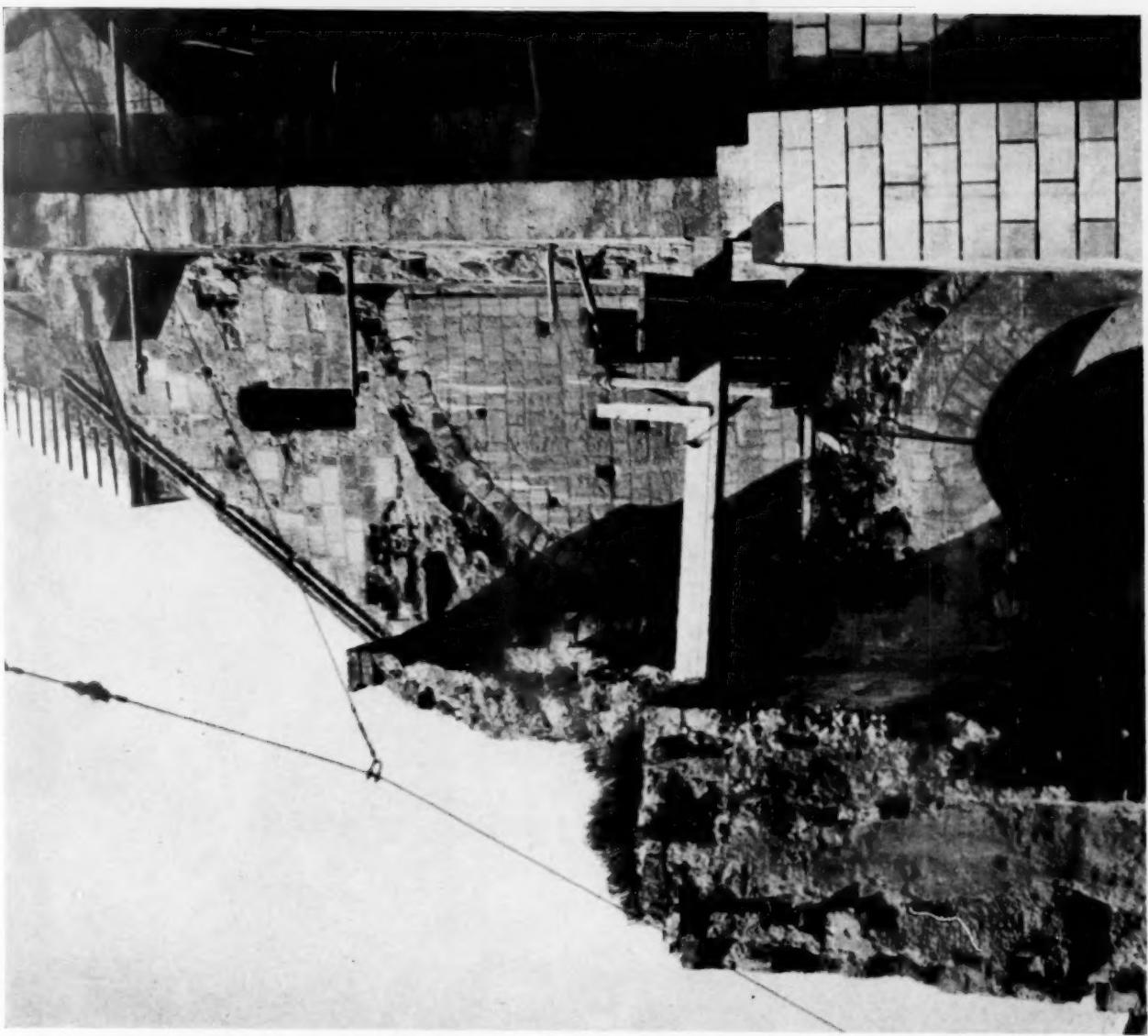


FIG. 8. Vestige of Quadrant Vault on West Side

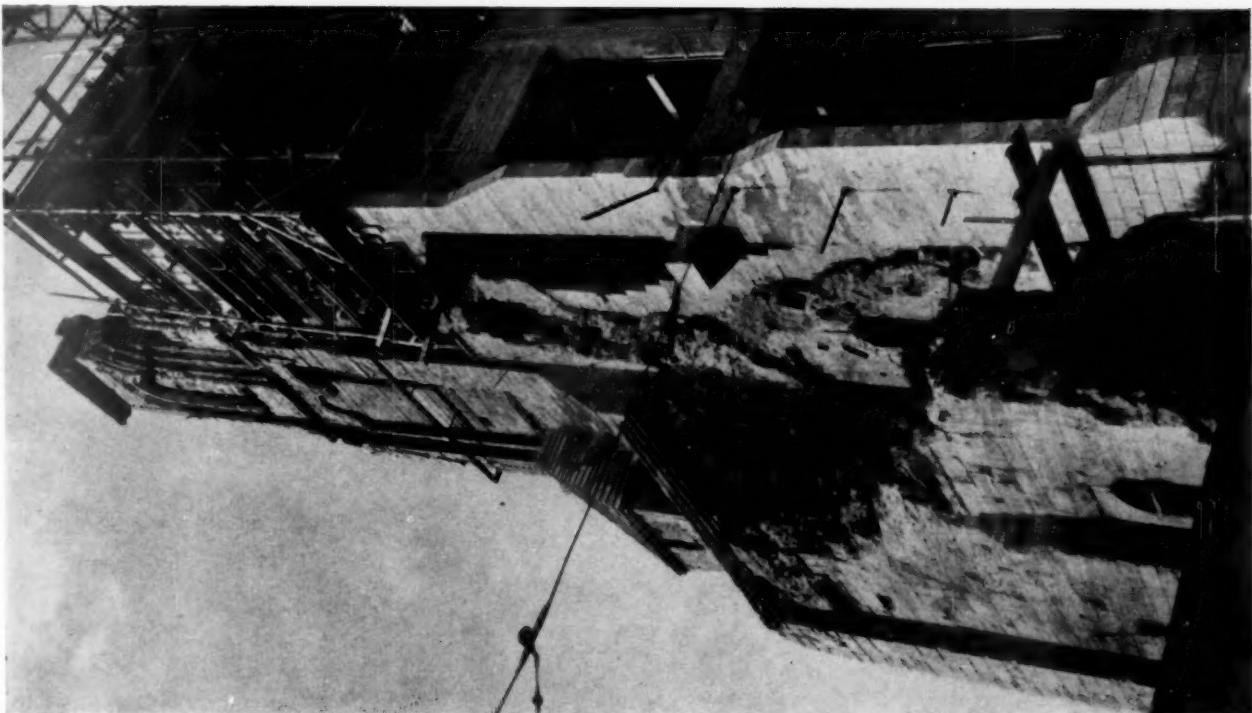


FIG. 7. West Side

FIGS. 7-8. TOURS, TOUR CHARLEMAGNE



FIG. 9. Northeast Transept Pier and Arcade now Destroyed (after Abbé Plat)

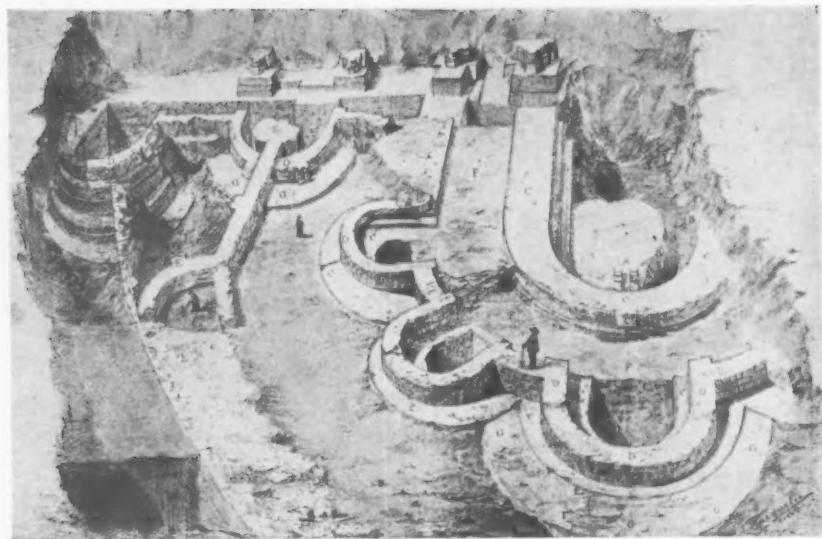


FIG. 10. Excavations of Chevet (Drawing by Masquelez)



FIG. 11. Cormery, Tour Saint-Paul: Ribbed Domical Vault

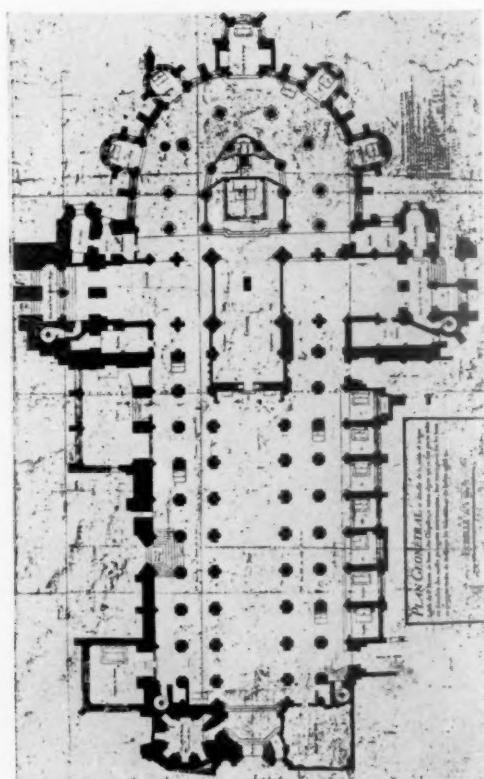


FIG. 12. Plan by Jacquemin (1779)

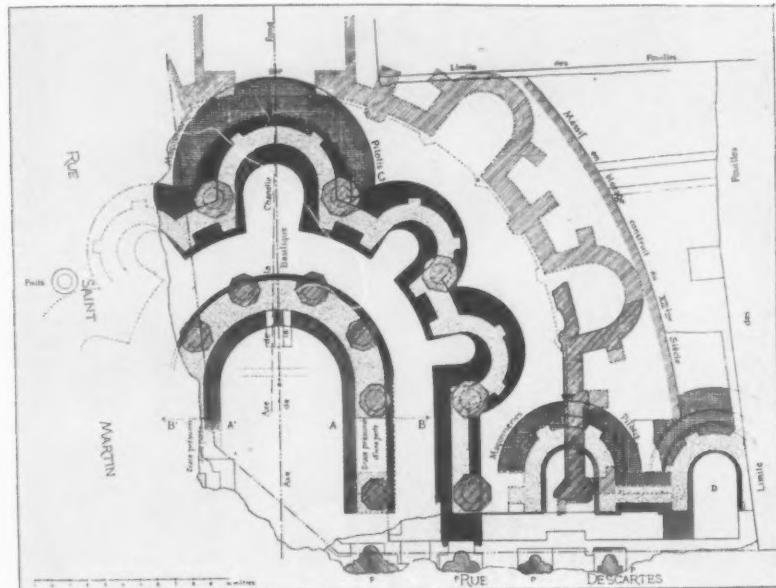


FIG. 13. Plan of Excavations of 1886 (Parcq, Lasteyrie)

FIGS. 9-10, 12-13. TOURS, SAINT-MARTIN

in place before the erection of the tower, and the mortar is consistent in tone in all parts except the tower; therefore, it follows that the piers, aisles, tribunes, transverse galleries, and transept chapels antedate both the Tour Charlemagne and the associated barrel vault of the transept with its abutment. Thus, these parts may be accepted as belonging to the church financed by Hervé, which, as Focillon⁹² and others have surmised, was of wooden trussed construction, unvaulted except for the aisles and apse. The drawing by Martellange, already referred to, showing the interior of the north transept of Sainte-Croix at Orléans gives an idea of the general appearance of the transept of Saint-Martin at this date.

In summary, it may be said that the church financed by Hervé early in the eleventh century initiated an extended program of construction which was subject to revisions as the work progressed, especially near the middle of the century. Assuming that construction began about 1000 and using as indications of speed of construction the parallels of Santiago and Saint-Sernin, structures of analogous size and type, it is scarcely likely that by 1014 when the dedication took place the entire church was finished. Probably the chevet was completed, as well as a part of the nave. The transepts may have been still in process of construction. Hervé remained treasurer until 1021 or 1022. The piers of the transept, on the basis of the parallel with Saint-Germain-des-Prés could be dated before 1014, but they may perhaps more safely be assigned to about 1025 to 1030, certainly before 1050. Wooden roofing was planned throughout the church except for the aisles and apsidal vault, and a cage-like crossing tower with wooden roof, analogous to that at Beaulieu-les-Loches and the original tower at Saint-Martin at Angers, may be assumed.

THE CHEVET

The restoration and chronology of the chevet of Saint-Martin constitute the most difficult aspect of the problem. Like the transept it, too, is related to questions of vital import in mediaeval architecture than can be resolved only after its successive forms have been determined. The restoration depends on the interpretation of the masonry discovered during the excavations between 1860 and 1886, examined in the light of what is known of the evolution of the ambulatory in France prior to the early eleventh century. Vital, too, is the correct interpretation of a passage in the *Sermon of Saint Odo*, written about 930, which constitutes the sole descriptive reference to the tenth-century church.

The final raid of the Normans on Tours took place in 903, at which time the *bourg* of Martinople with its houses, the church of Saint-Martin, and twenty-eight other churches were burned. Safe behind the walls of the fortified *cité* of Tours, the body of Saint Martin with them, the canons witnessed the efficacy of ramparts and immediately set out to surround Martinople with a fortified enclosure which was completed in 918.⁹³ The church of Saint-Martin was rebuilt slowly, for the body of the Saint was not removed from the little monastery of the Basoche at Tours to the reconstructed church until the twelfth of May, 919. This protracted period of construction is explained in part by the increased scale given to the new structure, an indication of the confidence of the canons in the new walls of Châteauneuf and their ability to protect the church henceforth from the depredations of the Normans. With this reconstruction the church of Saint-Martin enters upon a new phase of its history.

92. *L'art d'occident*, Paris, 1938, p. 40, note 1.

93. Vestiges of this wall are still visible. See Louis Bousrez, "Un fragment d'architecture carolingienne à Tours," *Bulletin archéologique du Comité des Travaux*, 1907,

pp. 58-61, and pl. xv. After the construction of the walls, Martinople became known as Châteauneuf (Castellum Novum).

It was quite certainly in this church of 903–918 that the first developed ambulatory and radiating absidioles were introduced of which the foundations may be recognized in the sub-ambulatory discovered in the excavations of the late nineteenth century. Some authorities have maintained that it is with the church erected after the fire of 997 that the earliest ambulatory must be associated.⁹⁴ The question has not yet been settled beyond a doubt, but indications are accumulating which point to the appearance of the form in relation to the early tenth-century church.

The solution of the problem rests chiefly on the interpretation of three pieces of evidence: (1) the passage in the *Sermon of Saint Odo* which makes a descriptive reference to a part of the church of Saint-Martin and has been interpreted by some to prove the existence of an ambulatory (ascription of the reference to the right church must also be determined);⁹⁵ (2) the masonry of the sub-ambulatory laid bare during the excavations of the 1880's; (3) the general evolution of the ambulatory in association with radiating chapels, into which the two ambulatories of Saint-Martin must be logically integrated.

The documentary evidence may first be scrutinized. It is *De combustione Basilicae beati Martini*, ascribed to Saint Odo.⁹⁶ The following passage is particularly significant:

In arcuatis porticibus voluerunt eam (ecclesiam) prisci constructores architectari, quoniam domus illa, quamvis latissima sit, turbis tamen sese imprimentibus, tantum solet esse angusta ut antipodis chori et angiposticulas, quamvis nolentes, subruant.⁹⁷

Translated it reads:

The former builders designed it with arcaded passages because this construction, although very wide, with the crowds pressing, is so constricted that they push over the benches and the little gates of the choir, though unwillingly.

To what church of Saint-Martin does this statement apply? Does Odo refer to the church erected after the fire of 903? Since there is no mention in the documents of a conflagration between that of 903 and the fire of 997, except the allusion by Odo himself to one just before he preached, it may be supposed that the fire which immediately preceded the sermon was not serious, but was sufficient to evoke his indignant indictment of the moral laxity of the clergy as the cause of the repeated fiery retributions visited on the church by Saint Martin. Thus the church in which Odo was speaking, although recently damaged, was actually the church built after the fire of 903, and the reference to the arcades and the problem of congestion applies to this structure.⁹⁸

Such reasoning necessarily depends on the acceptance of the sermon as the work of Saint Odo, and opinion has by no means been unanimous on this attribution. Until the nineteenth century it was considered an authentic document authored by the famous abbot of Cluny who was born in Tours, was a member of the Chapter of the *collégiale*, and was profoundly devoted to the cult of the Saint. A closer reading disclosed that in speaking of the fire at Saint-Martin, mention is made of one at Saint-Martial at Limoges which took place ten years after the death of Odo in 942. In view of this fact, the sermon was considered to be not by Odo, but by an unknown writer of later date.⁹⁹ Abbé Plat has pointed

94. Joan Evans, *The Romanesque Architecture of the Order of Cluny*, Cambridge, 1938, p. 67.

95. Plat, *op. cit.*, pp. 61–68.

96. Contained in the *Bibliotheca Cluniacensis*, pp. 145–160.

97. *Ibid.*, p. 146.

98. Plat interprets "quamvis sit latissima, solet esse angusta" as indicating by the tense that the church still

existed in large part when Odo spoke in spite of the fire, i.e. that the church of 903–918 had not been damaged seriously by the subsequent unrecorded disaster (*op. cit.*, p. 67).

99. Chevalier believed that it was delivered after the fire of 997, as did de Lasteyrie. Mabille assigned the sermon to ca. 1015 (*Les invasions normandes dans la Loire et les pèlerinages du corps de Saint-Martin*, Paris, 1869, p. 73).

out, however,¹⁰⁰ that the text alludes without ambiguity to a fire at Saint-Martin following which his listeners fortified the area with ramparts. Since it is definitely known that these walls were completed in 918, the church to which he refers must be that built after the fire of 903 and which had just been damaged by a conflagration shortly before the deliverance of the sermon. Because of the definitiveness of the reference, the troublesome comparison with the disaster at Saint-Martial at Limoges can only be interpreted as the intrusion of a later copyist or editor, and the sermon may be restored to Odo whose former membership in the Chapter qualifies him as the preacher.

It is disappointing that the precious passage quoted above, which is unique in describing a part of the early tenth-century church, is not more explicit, for it could easily have settled much that is now controversial. Although it is inconclusive as regards the problem of the ambulatory, a careful scrutiny yields some results.

De Lasteyrie argued that the arcades mentioned were those of the nave;¹⁰¹ Abbé Plat contends, on the other hand, that the aisled basilica was too common a form for Odo to have stressed the presence of nave arcades, and that anyway their existence could have had little bearing on the handling of crowds.¹⁰²

Acceptance of the reference as an indication of an apsidal arcaded screen between an ambulatory and Saint Martin's Rest is an attractive theory, but one scarcely justified by the text. Unless it could be proved that the choir benches were in the apse, a most unusual disposition, de Lasteyrie is right in believing that the reference is to the nave arcades, for the choir or chancel that is damaged in the crush would extend from the crossing area in front of the high altar well into the nave. At times of press the crowding would therefore be chiefly at the ends of the *transitus* and against the parts of the chancel that project into the crossing area, assuming that the worshippers were straining to approach the altar.¹⁰³ A press at this point could readily cause the damage to the chancel that is specifically mentioned in the text.¹⁰⁴ The aisles were not sufficient to relieve the pressure, as the statement says, and so the difficulty remained unsolved at the time of the sermon.¹⁰⁵

Since the crowding before the altar is singled out for comment by Odo and no reference is made to a circulation problem near the tomb, the ultimate goal of the multitude of pilgrims, the implication is that access was satisfactory at this point and that no problem existed. With annular corridors for over a century caring for an analogous circulation problem at the crypt level, one might logically assume that the same device at ground level was proving its usefulness at Saint-Martin when Odo preached. Thus the text contributes, if only in a negative way, to the plausibility of the theory that the ambulatory existed at Saint-Martin in the early tenth century.

At Charlieu about 920 an ambulatory of semicircular plan with a single chapel on the axis was constructed on a semi-excavated level, and at Clermont-Ferrand in 946 a rudimentary ambulatory with four radiating chapels was built on the crypt level. It is hard to believe that these represent the first occurrences of such a major form. It seems much more likely that the ambulatory and associated chapels were developed in connection with a great pilgrimage church where a powerful impetus existed for inventing a device to insure proper circulation about the tomb of the saint, rather than in a small church of the type of

100. *Op. cit.*, pp. 61-68.

101. *L'église Saint-Martin de Tours*, pp. 46-47.

102. *Op. cit.*, p. 65.

103. Cf. the same difficulty in Spanish cathedrals where the *coro* perpetuates the nave position of the chancel and the pressure of crowds between it and the high altar at

festival times is terrific.

104. The writer owes to Professor Conant many helpful suggestions in interpreting the meaning of the text.

105. The text proves one point conclusively, i.e. that the church had aisles and was therefore not a hall-type structure.

Charlieu. Furthermore, the single radial absidiole at Charlieu appears more like a simplification of an earlier and more complex plan than a formative step in an evolution. The church of Saint-Martin of the early tenth century qualifies ideally as the point of synthesis of experiments made in the preceding century. Charlieu, Clermont, and others follow along with a simplified or imperfect assimilation of the achievement at Saint-Martin.

The other source for information concerning the early ambulatory is the masonry revealed by the excavations for the foundations of the modern church in the late nineteenth century. Two separate ambulatories were uncovered along with vestiges of the thirteenth-century chevet (Figs. 10, 13). Beneath the lower courses of a sophisticated ambulatory, which can be assigned with assurance to the early eleventh century church of Hervé, are the thick crude walls of a sub-ambulatory from which radiate five absidioles inordinately narrow at the entrance and in plan semicircular on a trapezoid. So thick are the walls that externally the absidioles are tangent to each other.¹⁰⁶ These remains are obviously the subterranean spreading foundations for absidiole walls above,¹⁰⁷ and were never intended to show either externally or internally (as in the excavated chapel now visible in the crypt of the modern church). Since the foundations are not concentric with the vestiges of the chapels found above them and since their axis is different, it is clear that the original absidioles designed for these foundations were replaced by those belonging to the church of Hervé, the latter merely utilizing the older foundations, but with imperfect concentricity and a slightly different axis. The transept chapels of Hervé, on the other hand, at the time of their construction evidently had to be provided with their own foundations with which they are perfectly concentric, probably because the earlier church had no chapels at this position and no foundations were therefore available for re-use. At the same time an extension was made to the eastern part of the foundation massif of the axial absidiole to insure more adequate footing for the large axial chapel of the church of Hervé (Fig. 13).

In ordinary circumstances an analysis of the character of the masonry could be depended on to reveal helpful information concerning the chronology of the ambulatories. In this case, however, the masonry consists of foundation massifs formerly below ground and of relatively nondescript nature. Chevalier, Ratel, and de Lasteyrie subjected the excavations to intensive study. Ratel and Chevalier differed sharply on many points and waged a bitter pamphlet battle to establish their respective claims.¹⁰⁸ De Lasteyrie and Charles de Grandmaison, viewing the evidence with better perspective, were in general agreement on the dating of the various parts. Today, with the excavations almost entirely concealed beneath the modern church, the investigator must necessarily rely on the reports of those fortunate enough to have had access to them during the brief period they were exposed to view. Happily, the northeastern quadrant of the chevet lies undisturbed a few feet beneath the Rue des Halles and contiguous buildings, and awaits a favorable opportunity for excavations that will add much to knowledge concerning the church. Dependence on the reports of others is not as unfruitful as might seem to be the case. The scale plan of Émile Parcq (Fig. 13) is accepted by all concerned as accurate, and the descriptions, if not the interpretations, are detailed and trustworthy. Ratel and Chevalier were handicapped in their analyses not only by writing before the architecture of the Middle Ages was as well known as it is today, but also by their amazing disregard of the evidence of the extant Tour Charlemagne which should have been integrated with that of the excavations.

¹⁰⁶. While it is not impossible that a narrow wall interval separated the original absidioles above these foundations, such was probably not the case. Tangent apsidal chapels were rare in the Romanesque period, although Chambon (Creuse) (*ca.* 1100) provides an example.

¹⁰⁷. The thickness of 2.65 m. in the curve of the absidioles would seem to prove this beyond a doubt. Cf. the stepped foundation walls discovered by Professor Conant at Cluny.

¹⁰⁸. See note 11.

Fortunately the axial absidiole, larger than the rest and known today as the Chapel of Saint-Perpet, is still visible in the crypt of the modern church and is therefore available for first-hand examination. The crude walls of this chapel, now excavated internally so that they appear to be enclosing walls, were formerly below ground and served as foundations for visible masonry above.¹⁰⁹ The primitive level of the massif is indicated by a slight retreat just above the head of a person standing on the present depressed pavement of the chapel. On this retreat at the left are remnants of the cut masonry of the later chevet of Hervé.¹¹⁰ While there is nothing intrinsic in the technique of the masonry to attach it definitely to one of several centuries, Charles de Grandmaison has pointed out that the similarity between that of the sub-ambulatory and the masonry of a fragment of the fortified wall of Châteauneuf extant on the lower part of a tower and on the wall running west from it in the garden of the house at Rue Néricault-Destouches, 39, is worthy of consideration.¹¹¹ The wall was finished in 918. The analogies in the character of the masonry imply the same date, and would therefore suggest that the sub-ambulatory belonged to the church erected after the fire of 903 and consecrated in 918.

If the upper ambulatory and transept chapels are accepted as of about 1000, as they can be with confidence, the sub-ambulatory must be assigned to an earlier edifice. The series of catastrophes visited on the church of Saint-Martin by the Normans between 853 and 903 must have wiped out virtually every vestige of the earlier structures. This would leave only the church of 903-918 as the monument to which the sub-ambulatory could belong, the subsequent fire mentioned in the *Sermon of Odo* being sufficiently minor to require no complete reconstruction. Thus the archaeological evidence points to the first ambulatory of Saint-Martin as dating from the early tenth-century church. This is not at variance with the text of Odo which has been shown to have no direct bearing on the ambulatory problem, as some have thought. It is in harmony with the known steps in the evolution of the ambulatory.

Out of the fragmentary archaeological indications of early ambulatory development and the interpretive conjectures based on them, several generalities emerge. One is that the ambulatory finds its origin in the development of the crypt, where the practical problem of the circulation of pilgrims in the vicinity of the tomb is bound up with the problem of access to minor chapels. After a period of tentative approaches the elements amalgamate in a happy spatial solution which is then utilized not only in the crypt, but also on the main level of the church.

The origins of the ambulatory and radiating absidiolles must first be sought in the motivation which required their invention and brought them into being. The soul of the Christian church is the liturgy of worship and the accessory practices which enrich it; its structure is but the material shell which accommodates the ceremonies of worship and bestows upon them the beauty and dignity of setting. The structure owes its form not only to the requirements of the service, but also to certain accompanying phenomena of which not the least important is the veneration of the relics of the saints. The ambulatory and absidiolles as spatial forms are no exception and must be explained as much by reference to the evolving practical demands of the church as to any academic sequence of structural types that scholarship can discern in the mass of relevant material from the early Middle Ages.

The crypt was fundamentally a vaulted chamber, partially or wholly subterranean, al-

109. The foundation walls are of *petit appareil allongé* without brick courses. Ratel contended that the sub-ambulatory belonged to the fifth century church of Saint-Perpet, a designation in no way tenable.

110. Ratel, "Seance du 21 décembre, 1887," *Bull. Soc.*

arch. Touraine, VII, 1886-88, p. 313.

111. "Résultat des fouilles de Saint-Martin de Tours en 1886," *Bibliothèque de l'École des Chartes*, 1893, pp. 78-80. See also note 93.

though not necessarily so, which accommodated the body of a saint. In its simplest form it was an outgrowth of the pagan and Early Christian *memoria*, a chamber which sheltered the body of the deceased, and was surmounted by a *cella* or chapel. When incorporated in the fabric of the Christian church, the burial chamber was retained, but the *cella* above became the raised sanctuary of the church with its altar and sheltering ciborium. Thus the primitive *memoria* and *cella* were transformed from a simple form adapted to the needs of family veneration to one dedicated to the enlarged requirements of a public cult.¹¹²

As the crypt accommodated itself to the church which enveloped it and to its new function of displaying for veneration the remains of the saint which it sheltered, structural complications of future significance made their appearance. Desire on the part of the pious to find their last resting place in sanctified proximity to the saint who would intercede for the soul of the deceased before God, led to the inclusion of space for the tombs of prelates and princes, occasionally in an adjoining axial rotunda. Subordinate altars architecturally accommodated in chapels also found their place in the vicinity of the crypt chamber, and a very real problem of access and circulation arose.

Connected to staircases giving ingress from the church the corridor passed around the crypt massif, but within the apsidal wall, permitting the orderly circulation of pilgrims who were enabled to view the sarcophagus through an axial opening in the crypt wall. Of purely utilitarian function, this corridor is the origin of the future ground-level ambulatory. Sometimes of rectangular plan, sometimes semicircular, sometimes vague in plan due to its subsequent construction, the corridor served its primary purpose of making available to crowds of people the sanctity of the crypt, and at the same time provided access to the chapels grouped about. So satisfactory was this solution to the problem of circulation that, long after the development of the true ambulatory on the main level of the church, the crypt retained its early dispositions.

The second factor which eventually related itself to the circulation corridor is the subordinate altars. The need for the latter arose in part as a result of the cult of the relics, which was at its height in the ninth and tenth centuries. Churches vied with each other in the acquisition of holy relics which attracted pilgrims in great numbers to their advantage in wealth and prestige. The need for appropriate altars for the display and veneration of the relics became pressing. Further impetus for additional oratories was derived from the practice of holding private masses which became more widespread as the number of priests in ecclesiastical communities increased. When in the sixth century the Council of Auxerre forbade the celebration of several masses at the same altar in the same day, an augmentation of the number of altars was the logical reaction to the restriction. These demands presented a problem which the elementary basilican church was unqualified to satisfy until it had evolved further architecturally and suitable provisions had been made for chapels within its fabric.

At first the altars were located arbitrarily throughout the church as in old Saint-Peter's, or compartmented as shown in the plan of Saint-Gall. But such practices encumbered the church and could not be tolerated. Gradually chapels in the form of miniature apses designed expressly to contain the minor altars were grouped in the eastern areas of the church off the east wall of the transept, at the end of the choir aisles, sometimes in echelon, sometimes otherwise, but always in a systematic arrangement which contributed volume and

^{112.} For statements concerning the early form of crypts, see Jean Hubert, *L'art pré-roman*, Paris, 1938; Gabriel Plat, *L'art de bâtir*; Paul Frankl, *Baukunst des Mittelalters*,

die frühmittelalterliche und romanische Baukunst, Potsdam, 1926.

mass units to the composition of the church. Eventually the happiest disposition of all was found in the utilization of the annular corridor of circulation which had been developed in relation to the crypt as a means of orderly access to chapels arranged radially.

Formerly a device for permitting the focus of veneration inward through the *fenestella* on the sarcophagus of the saint, the corridor came eventually to be used at ground level primarily as a means of access to a series of chapels radiating outward.¹¹³ The spatial convenience of the new arrangement was no less satisfactory than its aesthetic potentialities. Concentric with the curve of the apse, the volume organization of ambulatory and absidioles viewed through the apsidal arcade was expressed in reverse by the external revelation of the wall envelopes of these forms which, with splendid imagination, were cast into aesthetic relationship with the surmounting apse, the flanking transepts, and the crossing tower. The aesthetic management of a purely functional device produced an architectural composition worthy of the sanctuary area of the church. Its subsequent survival in later ecclesiastical architecture bears witness to the vitality of its functional beauty.

The immediate problem is to establish a tentative sequence of dated monuments which expresses the transformation from the crypt corridor to the fully-formed ambulatory with radial chapels, as used at ground level, and particularly to locate and evaluate the contribution of the church of Saint-Martin in the evolution. It must be remembered that in the beginning the phenomenon of the circulation corridor and that of the subordinate chapels are separate and parallel, the two not finally integrating, except tentatively, until the tenth century. It is not surprising that the Renaissance of Charlemagne should contribute much to the initial interplay between the two forms, and that the ninth and tenth centuries, when the cult of the relics was at its height, should mark the era when the final chevet formula is prepared for and attained. Nor is it remarkable, considering that Saint Martin was the most illustrious of holy confessors, and that his tomb was the greatest pilgrimage goal in all France, that the church dedicated to him should function prominently in this evolution.

Merovingian crypts were relatively simple and without corridors, although with provision for private sepulchres. Only in the eighth and ninth centuries during the full power of the Carolingian Renaissance did more complicated crypts appear in celebrated churches where crowds of pilgrims presented a problem of circulation. To meet utilitarian needs there were sometimes united in one ensemble of vaulted chambers the *confessio*, corridor, oratories, and private tombs. As at Saint-Gall (*ca.* 819), crypts were not always subterranean, but could be on the main level of the church beneath an elevated sanctuary with the corridor having direct access from the nave without the necessity of stairs.

It was during this period of crypt expansion that the communication corridor was developed, occasionally as an addition to an earlier crypt, sometimes conceived from the beginning. The type represented at Saint-Gall consisted of an eastern transverse passage joined to two lateral galleries which in turn communicated with the church, a plan which had the advantage of permitting the use of groin or barrel vaulting. Another type, occurring as early as the eighth century,¹¹⁴ surrounded the crypt with an annular corridor with which was sometimes associated an axial chapel of rectangular or polygonal plan. Such a disposition appears at Chartres in the crypt of Saint Lubin belonging to the church built by Bishop

113. Exceptions are churches with a feretory like Santiago de Compostela where both functions were present.

by, *The Abbey of Saint-Denis*, New Haven, 1942, pp. 99-104.

114. For example, Saint-Denis (755). See Sumner Cros-

Gislebert in 858, and at Saint-Aphrodise-de-Beziers about 900.¹¹⁵ These are uncomplicated by the presence of chapels.¹¹⁶

The Salvatorkirche at Werden¹¹⁷ was extended eastwards sometime after the death of Liudger in 809 to include his grave which had first been outside the original apse of the church. Beneath the elevated sanctuary of the rebuilt apse was an annular corridor surrounding the tomb chamber. An axial chapel of rectangular plan opened from the corridor.

Two ninth century crypts that well illustrate the interplay between *confessio*, corridor, and chapels are those at Saint-Germain at Auxerre and at Saint-Philibert-de-Grandlieu. The crypt massif of the former¹¹⁸ goes back to the time of Conrad I, who, moved by a miracle of healing about 841, reconstructed the eastern parts of the sixth century church of Clotilda in the middle of the ninth century. By the dedication of the church in 865 the original crypt of Conrad had been surrounded on three sides by a groin-vaulted passage connecting with the lateral stairs at the west. Opening from the corridor were five chapels arranged in echelon, the four lateral ones of the *cul de four*¹¹⁹ type and the axial chapel a rotunda of duodecagonal plan.

The church of Saint-Philibert-de-Grandlieu (816–858)¹²⁰ is typical of those churches whose traditional apsidal termination was complicated by the later construction of eastward extensions which include absidioles in echelon served by a passage. Since the new constructions were above ground, their external expression figured in the composition of the church.

In the tenth century the advantages of the crypt system of communication were further exploited with notable progress evident both in the plan of the corridor and in the arrangement of chapels in relation to it. In this century, too, the true ambulatory at church level was formed. Hitherto the corridor had often been of rectangular plan to facilitate the use of groin and barrel vaulting, but such a plan had the twofold disadvantage of awkward passage of crowds at the angles and lack of correspondence with the semicircularity of the apse above. The annular corridor that had already appeared as early as the eighth century was superior and tended to replace the other type.

Interplaying with the corridor development was the disposition of minor chapels at the eastern end of the church. Since the eighth century, chapels had been located on the axis east of the chevet.¹²¹ With the introduction of the corridor to serve the crypt, advantage had been taken of its presence to provide convenient access to the chapels grouped in this area, often in echelon as at Auxerre and Grandlieu. The axial chapel was occasionally enlarged into a rotunda, serving as a mausoleum, perhaps under the influence of the Anastasis of the Holy Sepulchre.

It appears that early in the tenth century these planning methods were outmoded by the brilliant innovation made at Saint-Martin at Tours of arranging the five chapels radially off the outer wall of the annular corridor, an organization developing either out of an extension of the axial-chapel motif, or from a re-study of the echelon system with a view

115. For plan, see Noquier, "Saint-Aphrodise-de-Beziers," *Bulletin monumental*, xxxvii, 1871, p. 167.

116. For plans of other annular crypts, see Crosby, *op. cit.*, p. 102.

117. Wilhelm Effmann, *Die karolingisch-ottonischen Bauten zu Werden*, Strassburg, 1899; Frankl, *op. cit.*, p. 25.

118. See Jules Tillet, "L'abbaye de Saint-Germain d'Auxerre," *Congrès archéologique, Avallon*, Paris, 1907, pp. 627–653; also René Louis, "Séance du 26 mai," *Bulletin de la Société nationale des Antiquaires de France*, 1936–1938, pp. 149–157.

119. M. René Louis (*op. cit.*) is authority for the *cul de*

four form of the lateral chapels. For the restored plan see Conant, *Early Mediaeval Church Architecture*, pl. xxxiii b.

120. Subsequent to its initial construction a passage was built around the choir to permit people to visit the tombs without disturbing the services. See Robert de Lasteyrie, "L'église de Saint-Philibert-de-Grandlieu," *Mémoires de l'Académie des Inscriptions et Belles Lettres*, xxxviii, 1909.

121. For example, Saint-Denis (chapel dedicated 832), Saint Emmeram at Regensburg (740), the Salvatorkirche at Werden (after 809), and Saint-Germain at Auxerre (ca. 857).

to better coordination of the absidioles with the ambulatory.¹²² The new disposition in its geometrical character represents a rationalization of a hitherto less integrated arrangement. With the development of the ideal plan at Saint-Martin went another innovation of prime importance, the establishment of the ambulatory with radiating absidioles at the main level of the church.

In view of the prior existence of the floor-level crypt, this latter step may not seem significant, but there are basic differences. In the crypt at ground level, as for example at the Abbey of Werden, the ambulatory was within the curving wall of the apse, and both it and the crypt were concealed beneath the elevated floor of the sanctuary, so that they did not function aesthetically either as an internal or external factor in the grand composition of the church. At Saint-Martin, on the other hand, the ambulatory with its chapels was outside the line of the apse, and was expressed in the mass relations of the chevet. It is doubtful if at this early date an apsidal arcade permitted the integration of the volume of the ambulatory with that of the sanctuary.

In the case of Saint-Martin the ground level placement of the ambulatory was necessitated by a natural condition beyond the control of the builders. Water seepage from the Loire precluded from the first a deep subterranean crypt.¹²³ Nevertheless, it is important to note that the corridor, although located at the level of the church, still functioned as a means of access to the tomb, as well as to the radial chapels; it was in fact primarily a crypt corridor in function but located at ground level through force of geological circumstances.

An argument that might be advanced against the early tenth century date for the first ambulatory at Saint-Martin is the slowness with which it was adopted in mediaeval architecture. It would seem that the spatial convenience and the compositional possibilities of the new formula would be appreciable to all, and that its influence would have been apparent immediately in a wave of ambulatories and radiating chapels such as characterized the beginning of the following century. The poverty and chaos following the Norman invasions and the phenomenon of unrelated rather than correlated development of architectural forms in the early Middle Ages undoubtedly provide a partial explanation, but the main reasons seem to be more inherent.

In the first place, the conditions at Saint-Martin that led to the construction of the ambulatory at ground level were abnormal, and most churches continued to adhere to the traditional crypt beneath the sanctuary. At this level the influence of the radiating chapels at Saint-Martin is at once discernible, although modified by the restrictions of subterranean construction, and by an understandable hesitation, simplification, and uncertainty.

Another reason is that the function of the first ambulatory at Saint-Martin was still that of a crypt corridor, since this function was as much to permit veneration of the tomb as to give access to the chapels. It was therefore normal for its period except for the enforced location at ground level and the particularly well-studied distribution of the chapels. This conception of the form is in contrast to that which characterizes the early eleventh century ambulatories at ground level which, reserving the crypt corridor primarily for the service of the tomb, were designed to provide convenient access to the upper absidioles, at the same time maintaining sufficient remoteness from the sanctuary to keep the psalmody

122. Whether or not the chronicles are truthful in reporting the incidents attending the sojourn of the body of Saint Martin at Saint-Germain at Auxerre in the ninth century during the Norman raids on Touraine, it is intriguing to believe that contact with the crypt of Saint-Germain

resulted in the rationalization of its elements at Saint-Martin following the return of the body to Tours.

123. For discussion of this condition, see Ratel, *Les basiliques de Saint-Martin à Tours, note supplémentaire*, pp. 19 ff.

of circulating worshippers from interfering with the celebration of the frequent daily offices.¹²⁴ The ambulatory of this category thus had no obligation to the main altar beyond that of shielding it from disturbance and, except in churches with an eastern feretory, served primarily a centrifugal rather than inward function. It appears that the ambulatory with chapels built by Hervé early in the eleventh century above the foundations of the older chevet, probably the first at Saint-Martin to be provided with apsidal arcades, ushers in the new group of ambulatories that appears in the first half of the eleventh century.

The distinction between the early tenth-century form at Saint-Martin and the later group is not merely academic; on the contrary, it throws light on the reasons why the innovation at Saint-Martin was not immediately taken up and developed with the enthusiasm that characterizes the acceptance of the later conception.¹²⁵ Psychologically the early ambulatory at Saint-Martin must still be considered as an abnormally located crypt corridor with radially associated absidioles which affected its immediate successors chiefly in the radial arrangement of the chapels at the crypt level. Not until nearly a century later were its full potentialities recognized as a church-level form integrated with the internal composition, and was it made a part of the mediaeval formula of building. Between the promise and the realization nearly a century intervened during which the digestion of the idea initiated at Saint-Martin may be studied in a series of imperfect or incomplete assimilations of the scheme in fragmentary crypts of the tenth century.¹²⁶

From the scattered evidence it appears that it was at the crypt level that the basic idea of the chevet of Saint-Martin was carried on through the tenth century. It must be remembered, however, that destruction and replacement of the churches associated with these crypts make it impossible to ascertain what progress if any was made in the tenth century in exploiting the logical extension of the system by producing an analogous ambulatory above the crypt on the level of the church. Lack of information concerning these upper churches renders it difficult to measure the progress of the ambulatory at ground level. Not until close to the turn of the millennium does the ambulatory with radiating chapels assume its rightful place as a major motif in mediaeval architecture. By the beginning of the eleventh century the step precociously realized through a combination of special circumstances at Saint-Martin nearly a century before was accepted with full consciousness of its advantages and beauty, and became the common property of ecclesiastical architecture during the surge of creativeness that marks the birth of the developed Romanesque style.

Notwithstanding the precocious success of the organization at Saint-Martin in the church of 903-918, subsequent plans of the tenth century show hesitation in utilizing the full possibilities of the arrangement. An early evidence of its influence may be recognized in the tenth century Burgundian church of Charlieu¹²⁷ where as early as about 920 an ambulatory, excavated to the level of the sills of the windows and entered by a descent of several steps, encircled the apsidal wall. On the axis a single absidiole of horseshoe plan opened off the ambulatory. Although classified as a crypt corridor it is important to note that it was sufficiently above ground to function in the exterior design of the church, and

124. Cf. the elaborate screens of the Gothic period which further secluded the sanctuary from the ambulatory.

125. The absence of clearstory windows in the apse at this early date was a drawback and perhaps acted against the immediate adoption of the ambulatory at ground level. Although the apsidal clearstory was developed by the early eleventh century, it was sufficiently novel to be absent at Vignory (*ca.* 1045).

126. It was by no means universally adopted even in

large churches like the Cathedral of Nantes, where the tenth century crypt was without corridor or chapels. Not until the twelfth century were ambulatory and absidioles added to the earlier constructions.

127. Now in process of study by Dr. Elizabeth Sunderland of Wheaton College. For her restoration of the eleventh-century church, see "The History and Architecture of the Church of St. Fortunatus at Charlieu in Burgundy," *ART BULLETIN*, XXI, 1939, pp. 61-88.

that the single absidiole is analogous in shape, depth, and horseshoe plan to those whose foundations are preserved in the sub-ambulatory of Saint-Martin. In other words, the sophistication of the ambulatory at Charlieu suggests rather a simplification of the complete and slightly earlier form at Tours, than an elementary step in the ambulatory evolution.

A more complete reflection of the system of Saint-Martin is evident at Saint-Pierre-le-Vif at Sens,¹²⁸ where between 920 and 940 additions to the crypt were made by Abbé Sanson east of an earlier structure. The plan shows a compromise between the echelon and radial systems of chapel distribution. Between lateral chapels repeating those of the older church is a polygonal chamber encircled on the east by an annular corridor from the outer wall of which radiate three small absidioles of horseshoe plan. Again the analogy with the sub-ambulatory of Saint-Martin is borne out by the plan of the chapels and their organization.

Most significant of all is the crypt of the Old Cathedral of Clermont-Ferrand that was consecrated by Bishop Étienne II in 946.¹²⁹ Praised in contemporary writings as unusual, and imitated at Saint-Aignan at Orléans according to the monk Helgaud, the plan shows a wavering between the old rectangular plan for the crypt corridor and the semicircular layout at Saint-Martin. The four chapels are radial, but were rectangular in plan, at least internally. The plan reveals a normal crypt massif encircled on the east by a corridor laid out on a three-centered curve and attached to straight lateral passages. At five positions in the corridor groin vaults interrupt the annular vaulting of the remainder. Except for the rectangular shape of the chapels and a certain indecisiveness in the plan of the ambulatory, the system is significantly close to that of Saint-Martin.¹³⁰

A radial distribution of apsidal chapels characterized the apse of Cluny II (*ca.* 955), although the chapels were of rectangular plan without indication on the exterior, and no ambulatory separated them from the feretory.¹³¹

The crypt of Saint-Philibert at Tournus (*ca.* 979)¹³² shows the adoption of the system of Saint-Martin with a sureness of handling that bespeaks the accumulating confidence of the builders in an adjustment which had to be mastered gradually. The well-developed ambulatory surrounds the crypt massif and gives entrance to three, deep, rectangular chapels radiating from it. The present chevet above the crypt is later, but in its correspondence with the plan of the crypt below may well reflect the disposition of the late tenth century church.

From these scattered indications it is apparent that the builders were experimenting with the innovations of a common prototype, adopting it in part, hesitatingly, imperfectly, and usually at crypt level where flexibility of design was limited by structural exigencies. Thus, the acceptance of an ambulatory at Saint-Martin in the early tenth century is not at variance with the evidence of succeeding examples; indeed, its presence at the beginning of the century gives meaning to the sporadic reflections which follow in the period of gestation.

While the problem has not been proved beyond a doubt, a convincing case for an ambulatory with the radiating chapels has been made for Saint-Martin in the early tenth

128. The complete layout is known from a plan of 1656, reproduced in Hubert, *L'art pré-roman*, pl. 1 d.

129. Vestiges can still be seen beneath the choir of the Gothic cathedral. See H. du Ranquet, *La cathédrale de Clermont-Ferrand* (Petites monographies des grandes édifices de la France), Paris, n.d., pp. 33-39.

130. Nothing is known of the character of the contemporary church above this crypt. Later in the Romanesque period a church with absidioles of horseshoe plan surmounted the tenth century crypt.

131. Conant, *Early Mediaeval Church Architecture*, pls.

xxxvi and xxxvii.

132. Jean Virey, "Saint-Philibert de Tournus," *Congrès archéologique, Dijon*, Paris, 1928, pp. 368-425. The rectangular plan of the chapels suggests the influence of the crypt of the Cathedral of Clermont-Ferrand, especially since the monks of Saint-Philibert possessed the priory of Saint-Pourçain in Allier and would therefore have connections with the Auvergne. See René Crozet, "Églises romanes à déambulatoire entre Loire et Gironde," *Bulletin monumental*, xciv, 1936, p. 70, note 2.

century. The question then arises as to what the disposition was in the area of Martin's Rest, especially as regards the treatment of the apsidal division between the ambulatory and sanctuary. Was there a solid wall or an apsidal arcade? The text of Odo throws no light on the problem, in spite of Plat's insistence that the reference is to apsidal arcades. The foundation wall of the apse revealed in the excavations of the 1880's has the same axis as the upper ambulatory, rather than that of the lower, and implies an association with the former. In the early tenth century did a solid apsidal wall rise above an earlier foundation to be replaced by an arcade in the early eleventh? On the parallel of the apsidal wall of Charlieu it would seem likely, especially since there is no proof that an apsidal arcade occurs elsewhere so early. Furthermore, in crypt ambulatories solid walls are necessary for the support of the church above, and as has been shown, it was in the crypt that the ambulatory had its birth. The apsidal wall at Saint-Martin, however, would have been interrupted on the axis by an arch or hagioscope that would establish communication with the tomb, placed as it was on the periphery of the main apse. Had arcades been used, it seems unlikely that Charlieu, modest though it was, would have failed to emulate such a satisfactory device. There is no evidence that the Cathedral of Clermont-Ferrand of 946 or the church at Tournus contemporary with the crypt of *ca.* 979 had apsidal arcading on the upper level between the sanctuary and the ambulatory. Not till the early eleventh century does apsidal arcading appear as an established feature, and not until the construction of the church of Hervé can one be fairly certain that such a feature appeared at Saint-Martin. By this date it had been recognized that the high percentage of mass required in the wall between tomb chamber and corridor on the crypt level for purposes of support was at ground level an unnecessary restriction on the view of the tomb, and that an open arcade was not only feasible structurally, but was a logical invention for improving the function of the circulation corridor. Like the ambulatory with radiating chapels, the apsidal arcade was a direct out-growth of utilitarian needs as conditioned by structural requirements. While establishing harmony with the nave arcades, the apsidal screen opened up the ambulatory volume to view from the church, and integrated it spatially with the sanctuary, just as externally its utilitarian presence had already been made an aesthetic virtue.

The prestige of Saint-Martin was enormous and when a century later the church imitated its own prototype ambulatory in a more pretentious version, of which vestiges were discovered, it recrystallized a formula which was enthusiastically adopted during the fast-moving naissance of the Romanesque style which was then ready to assimilate it. Although continued with little change in the crypt, the motif as used at ground level was now separated from the sanctuary by an apsidal arcade made possible by the alleviated structural demands of this position, and was given a prominent place in the composition of the church. Probably for the first time clearstory windows appeared in the apse. It is not entirely wishful thinking to believe that the basilica of Hervé with its grander chevet system superposed on the foundations of the early tenth century provided stimulation for this wave of ambulatory construction. With the contemporary church of Notre-Dame-de-la-Couture at Le Mans,¹³³ it stands at the beginning of the new century as the inaugurator of a new series

¹³³. The date of the ambulatory and five radiating chapels unfortunately cannot be ascertained exactly. The church was built in the last years of the tenth century by Abbé Gausbert. The burial of Abbé Sigefroid of Le Mans in the church about 997 provides an indication of date, but Lefèvre-Pontalis was of the opinion that the ambulatory

was not erected until the early eleventh century. In any case it is an early example of the series. One absidiole still exists. See Robert Triger, "L'église de la Couture," *Congrès archéologique, Angers et Saumur, Paris, 1910* (Part 1), pp. 281-287.

of ambulatories that centers in the valley of the Loire and disseminates its influence throughout France and to other countries.¹³⁴

From stylistic evidence some indication of the chevet of Hervé may be deduced. Most of the notable apsidal elevations of the eleventh and twelfth centuries in Touraine and vicinity reveal a design of such basic uniformity that they would seem to stem from a single influential prototype. At Saint-Aignan-sur-Cher, Preuilly-sur-Claise, Saint-Léonard at Ile Bouchard, and Fontrevault, between the arcade and the clearstory is a triforium decorated with a range of blind arcades. The treatment of the decorative arches and the sides of the windows with colonnettes also constitutes a uniform system. The complete apsidal formula passed into the Pilgrimage structural repertory.¹³⁵ It is a logical surmise that the apse built by Hervé, perhaps somewhat rebuilt in the upper parts in the middle of the eleventh century, possessed this organization and served as a model for the adaptations at various scales elsewhere.

THE NAVE

The restoration of the nave derives chiefly from evidence contained in the Jacquemin plan, the wash drawing, and the Tour de l'Horloge. It is apparent at once that in its final form the western arm of the church was even more a conglomerate of styles than the transept (Figs. 2, 12). The piers of the nave arcade are asymmetrical in section with parts dating from different periods and the archivolts are semicircular. On the other hand, the piers between the aisles are cruciform and support pointed arches. The impost mouldings of the two pier-types differ, those between the aisles being heavier and more complex. The outer aisles are groin-vaulted while the inner ones seem to have had their vaults removed when the outer aisles were added. All parts above the triforium string course appear to have been rebuilt in the twelfth century in the early Gothic style which was then finding favor in the region. The towers likewise date in large part from this period. Out of this mass of heterogeneous evidence the Romanesque states must be deduced.

Of prime importance in establishing the evolution is the interpretation of the nave piers, which bear every sign of a succession of additions. The primary form was a pier of rectangular section¹³⁶ terminating in a simple impost moulding limited to the arcade sides and upholding a stilted semicircular arch of two orders.¹³⁷

It is possible that these piers in their original state are vestiges of the church erected after the last Norman raid in the early tenth century. The reasons are circumstantial, but worthy of examination. Although the rectangular section was common in piers of the late tenth and eleventh centuries,¹³⁸ particularly in small or conservative churches, the more articulated cruciform section was well developed by the tenth century¹³⁹ and led to the

134. The chief examples of the ambulatory in the first half of the eleventh century include Fulbert's Cathedral of Chartres (1020-1024), Cathedral of Rouen (*ca.* 1025-1030), Cathedral of Angers (*ca.* 1025), the crypt of Saint-Aignan at Orléans (dedicated 1029), La Trinité at Vendôme (dedicated 1040), the abbey of Jumièges (without chapels) (1040-1067), Beaulieu-les-Loches (*ca.* 1050), and Saint-Julien-du-Pré at Le Mans. The ambulatory also appeared early in a weak form in Italy at San Stefano at Verona (*ca.* 990), in the Cathedral of Ivrea (*ca.* 1000), and in the Cathedral of Aosta. The point of origin was certainly France. See Porter, *Romanesque Sculpture of the Pilgrimage Roads*, I, p. 193.

135. Cf. the apsidal elevation of Sainte-Foi at Conques with that of Saint-Aignan-sur-Cher.

136. Only excavation can determine the form of the bases of the piers which are not shown in the wash drawing be-

cause of the raised ground level. On the evidence of the parallel offered by the bases of Sainte-Croix at Orléans (after 989), it may be conjectured that they consisted of a simple sloping moulding above a plinth.

137. It is significant to note that the degree of stiltling in the arches and the character of the double archivolts of rectangular section are later to be found in the formula of the Pilgrimage style.

138. For example, at Montiérender (*ca.* 990), Saint-Bénigne at Dijon (1001-1018), and Vignory (*ca.* 1045). Except at the crossing, piers of rectangular section were the general rule in the Carolingian period.

139. As in the narthex church of Saint-Germain at Auxerre (consecrated 865), Saint-Philibert-de-Grandlieu (816-858), and Sainte-Croix at Orléans (after 989).

gracious combinations of pilasters and engaged columns which constitute the compound piers of the later Romanesque period. With the model of the cruciform piers of Sainte-Croix at Orléans before him, it would be surprising if the builder of the church of Hervé overlooked the beauty of this more complicated section in favor of the soberer rectangular type, the inference being that the latter antedates his church. The piers supporting the ends of the transept end-galleries, surely by Hervé, are cruciform. It is conceivable that Hervé salvaged the nave arcade of the early tenth-century church, to which the sub-ambulatory apparently belongs, and incorporated it in his own more pretentious edifice.¹⁴⁰

On the other hand, the prevalence of the rectangular section in piers of the eleventh century, and especially the extreme length of the nave of Saint-Martin, suggest that the piers belong to the church which was built for Hervé in the form of a typical wooden-roofed Capetian basilica. Both the Jaquemin plan and the presence of *petit appareil* on the east side of the Tour de l'Horloge¹⁴¹ indicate that the church to which the simple piers belong extended to the tower. Analogies with the proportions of Beaulieu-les-Loches and Saint-Hilaire at Poitiers, both of which are about contemporary with Saint-Martin, serve to relate the latter to the early eleventh century rather than to the early tenth. Furthermore, the documents make much of the reconstruction of Hervé and seem to imply a new and enlarged edifice, rather than a mere rebuilding of an earlier monument. The deviation of about three per cent in the axis of the nave in relation to the rest of the church may or may not be significant in this connection. Subsequent to its dedication in 1014 the transept was either completed with, or altered in favor of, the square-core, engaged-column type of pier. About all that can safely be said in respect to the date is that the nave arcade in its original form antedates the Romanesque transept as it was about 1025–1030. The nave at this time certainly had a wooden-roofed tribune and single, rather than double, groin-vaulted aisles.¹⁴²

On the analogy of radial churches which reflect more or less closely the dispositions of Santiago de Compostela, Saint-Sernin at Toulouse, and Sainte-Foi at Conques,¹⁴³ it is intriguing to believe that certain characteristics of the lost church of Hervé lie unrecognized in similar radial structures in the Loire valley. The church that best qualifies as a possibility is Saint-Genest at Lavardin, dated about 1042.¹⁴⁴ It has already been shown that its tower vault constituted an important step in the evolution of the ribbed vault of the Tour Charlemagne, and it is possible that its nave reflects in part the early eleventh-century nave of Saint-Martin. When Saint-Genest was built the Tour Charlemagne had not yet been constructed, nor had barrel vaulting been introduced into the wooden-roofed transept. Saint-Genest, which has no transept, would therefore reflect only the nave of Hervé. The piers are similar except for the presence of shallow pilasters on the aisle side. The tribune is absent because of the unpretentious scale, and the aisles are roofed in wood. It would be surprising if Saint-Martin had not disseminated in some measure the influence of its architectural form in the immediate region, although disparity in scale and importance between

^{140.} Abbé Plat (*L'art de bâtir*, p. 189) believes that the early tenth-century church was three hundred feet long and that Hervé built his church on the old foundations. He offers no proof for such dimensions for the earlier structure.

^{141.} Noted by Palustre (*Bull. Soc. arch. Touraine*, VII, 1886–88, p. 308). He also records the presence of similar masonry at the extremity of the south transept.

^{142.} If the three-aisled church of Hervé was equal in width to the nave and inner aisles of the five-aisled plan, it would have been about 18½ meters wide internally. It is possible, however, that the original aisles were slightly wider, i.e. equal in width to those flanking the choir which were untouched in the twelfth century. The decreased

width of the inner aisles after the expansion of the western arm, as seen at the point of juncture with the transept (Fig. 14), bears out this theory. The internal width of the church of Hervé would therefore be about 19½ meters. Its external length from the axial absidiole to the eastern wall of the Tour de l'Horloge was about 90 meters. Cf. the width of the naves of Beaulieu-les-Loches (14.06 m.) and Saint-Hilaire, Poitiers (15.45 m.). These churches, however, originally had a single hall-type nave.

^{143.} Cf. Lugo and Orense in relation to Santiago, and Figeac, Marcillac, and Saint-Gaudens in relation to Saint-Sernin and Sainte-Foi.

^{144.} See note 62.

the great *collégiale* and its modest neighbors would tend to exclude any literal imitation of its complete fabric.

The character of the façade of Hervé cannot at this stage of the investigation be definitely determined, but evidence is appearing which indicates some form of westworks perhaps flanked by turrets.

THE RECONSTRUCTION OF THE NAVE ARM

Just as the transept underwent an important transformation in the middle of the eleventh century, so the nave arm was recreated at the end of the same century. The chronicles record a fire in 1096 during ceremonies in honor of the presence in Tours of Pope Urban II, who accorded indulgences to those who helped in the restoration of the church.¹⁴⁵ Although only the chevet is mentioned as having suffered, the necessity for repairs caused by the conflagration seems to have provided the opportunity for widening the western arm of the church and for the replacement of the wooden roof with barrel vaulting.¹⁴⁶

On stylistic evidence alone the expansion of the western arm through the addition of outer aisles can be assigned with conviction to about 1100 and the following years.¹⁴⁷ Such an enlargement would necessarily involve the taking down of the outside walls of the three-aisled church in order to erect, probably on the old foundations, the range of piers separating the double lateral aisles. This could not well have been accomplished had barrel vaulting been extended into the nave prior to this date. The presence of a wooden-roofed nave up to the date of the expansion can thus be safely assumed.¹⁴⁸

The new piers between the aisles are not of the simple cruciform type exemplified at Sainte-Croix at Orléans, but are complicated by *dosserets*, or pilaster elements, in the re-entrant angles.¹⁴⁹ An indication of their later date is the profile of the impost mouldings which is more complex than those on the nave piers. Most conclusive is the presence of pointed arches (Fig. 2) which are deliberately used in contrast to the round arches of the nave arcade. Employed in conjunction with the groin-vaulted outer aisles, they cannot possibly be interpreted as Gothic; they rather represent the introduction of Romanesque pointed arches into the fabric of Saint-Martin. This must have occurred about 1100, for Professor Conant has shown that pointed arches were first used systematically in a conspicuous church in France in Cluny III¹⁵⁰ where they must have been envisioned about 1088 and constructed in subsequent years.¹⁵¹ In the light of the enormous prestige of Cluny and especially its interest in the Pilgrimage Roads, it is not surprising to discover the influence of the great abbey making itself felt in the fabric of Saint-Martin.

It is not only in the pointed arches that this contact with Cluny III may be recognized, but also in the appearance of the five-aisled plan (Fig. 12). Although common in the great basilicas of the Early Christian period, the five-aisled plan suffered an eclipse until the

145. *Chronicon Turonense Magnum* (ed. Salmon), p. 129.

146. Not only may this desire for enlargement be ascribed to the practical need for more space, but it is entirely possible that the spirit of rivalry, which undoubtedly existed among the great Pilgrimage churches, also figured in the decision to increase the size of the structure.

147. Abbé Plat (*op. cit.*, p. 67) assigns the five-aisled plan and the aisled transepts with their chapels to the early tenth century, with the church of Hervé merely a more splendid construction on the same plan. In the face of the evidence this would seem to be completely untenable.

148. There is a tradition in Touraine for barrel-vaulted transepts and choirs associated with wooden-roofed naves. Such an arrangement existed originally at Fontevrault and

Saint-Aignan-sur-Cher.

149. The prior occurrence of the same pier section, including *dosserets*, in the lateral supports of the transept end-galleries at Saint-Martin, suggests that these may have been the inspiration for the new piers between the aisles.

150. Professor Conant advances the plausible theory that the pointed arches at Cluny III were inspired by those at Montecassino (1066-1071). See "The Third Church at Cluny," *Medieval Studies in Memory of A. Kingsley Porter*, Cambridge, 1939, II, p. 336.

151. Deshoulières (*Au début de l'art roman*, pp. 145-146) likewise assigns the earliest use of the pointed arch in France to about 1100.

eleventh century when it was occasionally employed as the logical device for securing the desired width and magnitude in the greatest of the Romanesque churches. About 1100, at the time of the enlargement of the nave arm of Saint-Martin, the five-aisled plan was at the disposal of any builder who was in a position to utilize it.¹⁵²

To effect the wider plan, it was necessary to remove not only the outside walls of the western arm of the church of Hervé, but also the groin vaults of the original aisles.¹⁵³ The fulfillment of the latter requirement made it possible to achieve a spatial organization which tends to characterize five-aisled churches into the Gothic period, namely the high-inner, low-outer aisle relationship. Already perfected at Cluny, the device was adopted at Saint-Martin, but expressed within the limitations of pre-existing forms. The former nave arcade and tribune arches were retained, but the inner aisles were left without vaults, thus throwing the former aisle and tribune spaces into one volume and producing a lofty inner aisle that rose considerably above the new outer aisles in an arrangement not truthfully represented on the nave wall (Fig. 16).¹⁵⁴ The resulting device is not without parallel, for floorless "tribunes" resulting in lofty aisles occur at Montiérender (*ca.* 990)¹⁵⁵ Vignory (*ca.* 1045), and parts of Saint-Remi at Reims, and with quadrant vaulting at Châtelmontagne (*ca.* 1100). The nave of the Cathedral of Rouen perpetuates the arrangement in the Gothic period.

In the creation of the new inner aisles the nave piers, hitherto of simple rectangular section, were modified on the aisle side by the addition of a pilaster flanked by dosserets in order to harmonize them with the new cruciform piers between the aisles and to provide the necessary support for the quadrant vaulting which was at this time introduced into the newly created inner aisles. It may be assumed that the pilasters and *dosserets* rose to the height of the diaphragm arches which sustained the half-barrel vaulting (Fig. 16).

It is evident that ever since the introduction of a logical vaulting system into the transept in the middle of the eleventh century it was the intention of the builders to extend it into the nave. This was evidently not accomplished before the addition of the outer aisles, since the walls of the original nave could not have been demolished to make way for the new piers had they been supporting and buttressing heavy vaulting. That barrel vaulting in the nave was planned and executed, at least in part, is indicated by the addition on the nave side of the original piers of engaged colonnettes analogous to those in the transept, obviously in preparation for the support of transverse arches of a barrel vault (Fig. 2).¹⁵⁶ At the same time, quadrant vaulting, already utilized as appropriate abutment in the tribunes of the transept, replaced the former wooden roofs over the nave triforium space (Fig. 16). As in the transept, the benefits of clearstory lighting were sacrificed to achieve a close structural relationship between barrel vault and its abutment. The result of these changes was a high inner aisle surmounted by quadrant vaulting, giving on to a barrel-vaulted nave through a nave arcade and a range of false tribune arches.¹⁵⁷

This adjustment of high, quadrant-vaulted aisle buttressing a nave barrel vault is recognizable at once as one of the characteristic structural formulas of Poitou and related regions. Sainte-Eutrope at Saintes, an important church of the Pilgrimage Roads, provides a sig-

152. See note 3.

153. The vaults of the transept aisles were left intact since there was no question of extra aisles at this position.

154. Even after Gothic vaults were introduced into the church later in the twelfth century, the same spatial organization in the management of the inner and outer aisles was retained, as the wash drawing shows (Fig. 2).

155. The present vaults in the aisles date from the seventeenth century.

156. Cf. Bernay where, about 1025, engaged columns seem to have been added to simple nave piers. See note 31.

157. At some time subsequent to the introduction of vaults into the nave, it may be presumed that the crossing vault, already prepared for, was executed (Fig. 17).

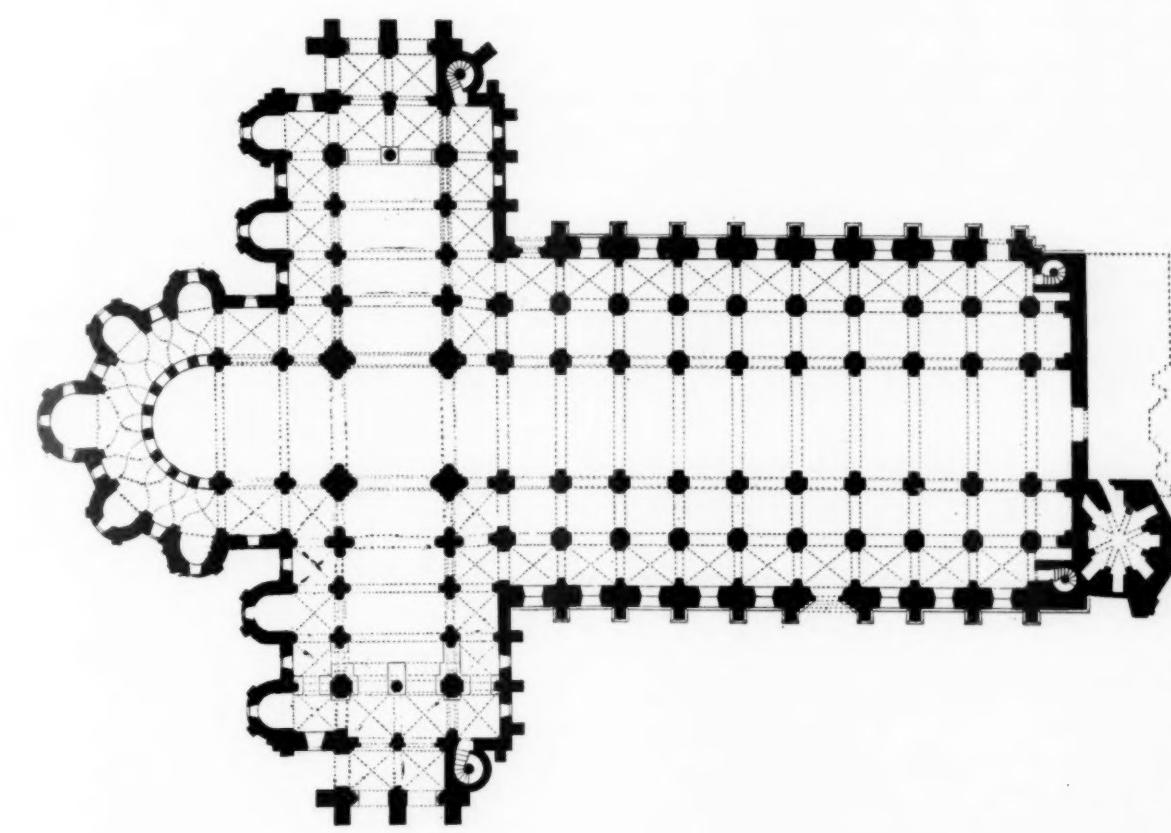


FIG. 14. Plan of Church ca. 1150 (Hersey)

FIGS. 14-15. TOURS, SAINT-MARTIN

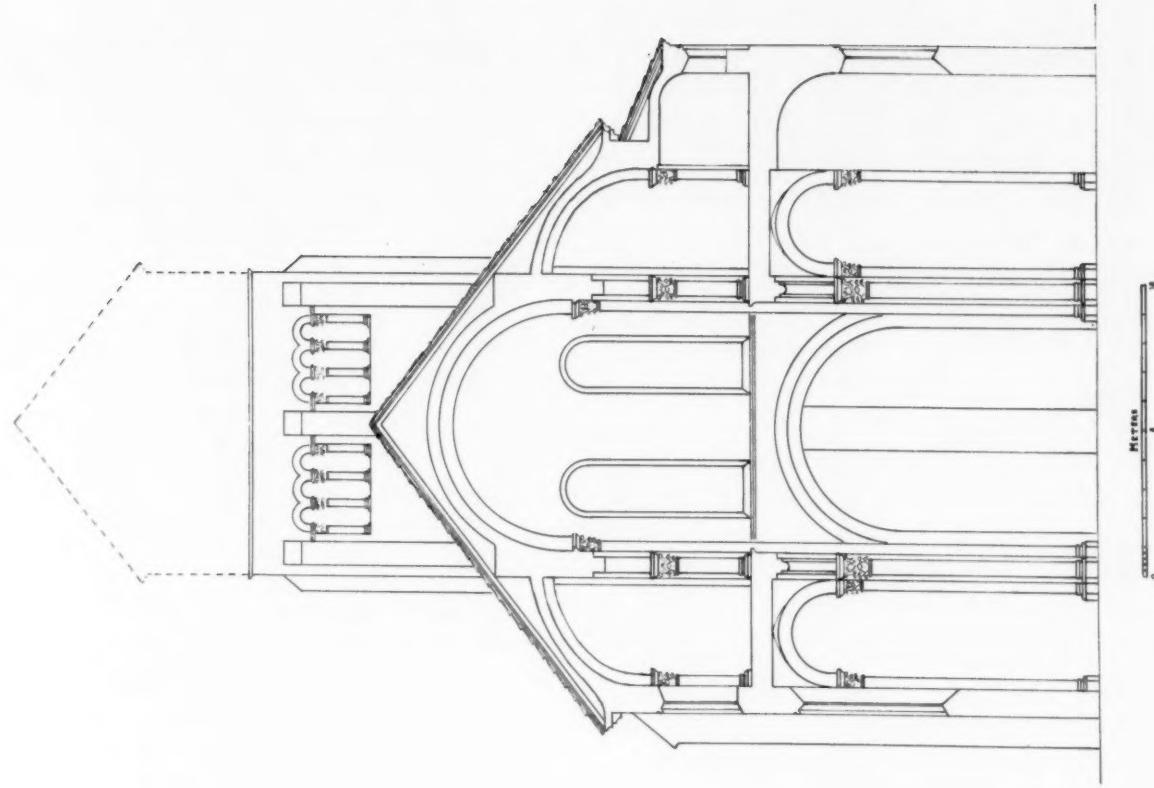


FIG. 15. Transverse Section of Transept (Hersey)

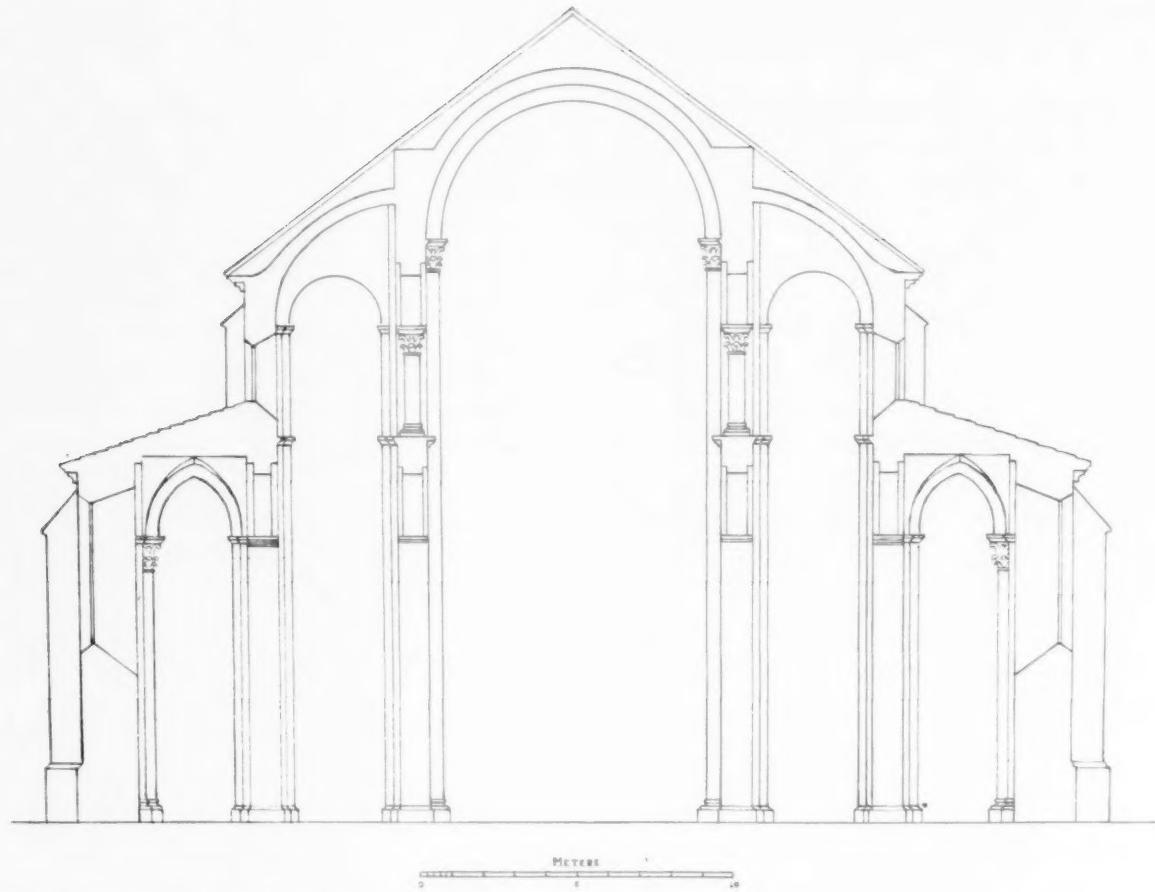


FIG. 16. Transverse Section of Nave *ca. 1150* (Hersey)

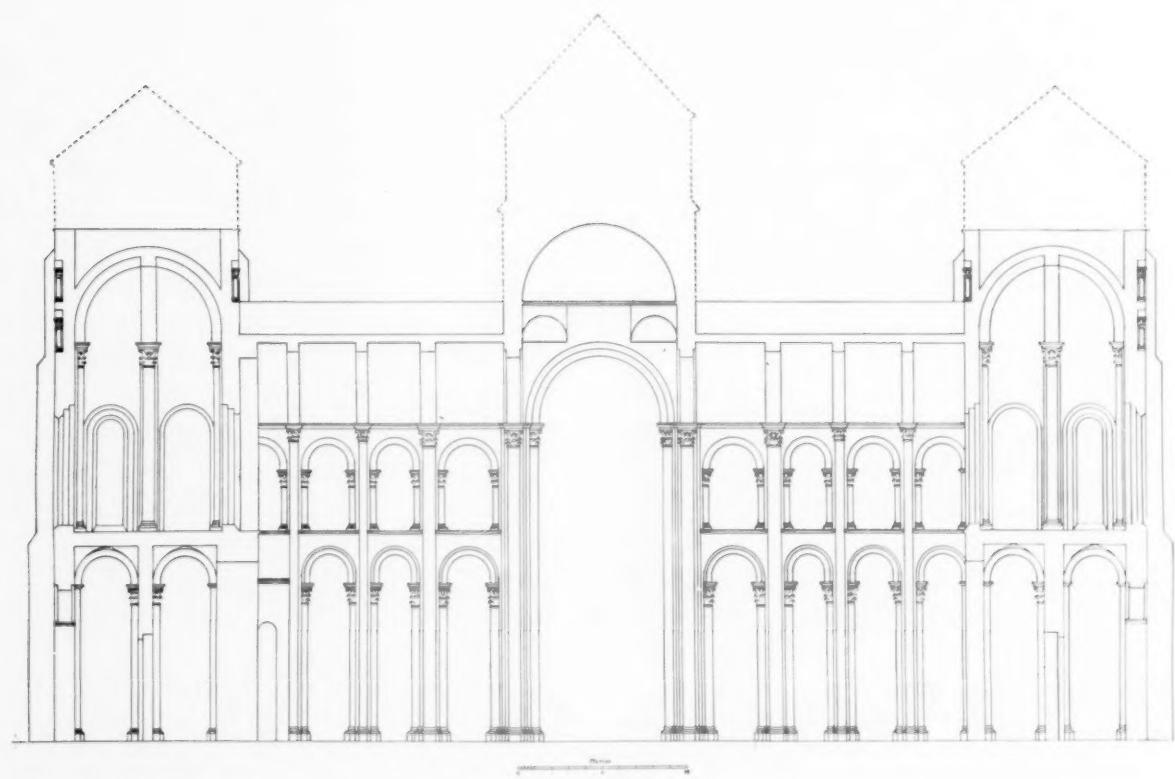


FIG. 17. Longitudinal Section of Transept (Hersey)

FIGS. 16-17. TOURS, SAINT-MARTIN

nificant parallel. Whether the campaign was entirely carried through to completion in the nave of Saint-Martin before the Gothic transformation took place in the third quarter of the twelfth century, is impossible to determine, but it seems certain that the evolution just set forth was intended to bring into the church a structural unity which until the early twelfth century it had lacked.

It is this construction in the nave during the first third of the twelfth century which may well have evoked the statement by Aymery Picaud in the Pilgrims' Guide that Saint-Martin was built "ad similitudinem . . . ecclesie beati Jacobi." Since Santiago was substantially completed by 1124,¹⁵⁸ any construction of a similar type going on at Saint-Martin about this date or a little later might be interpreted as an imitation of Santiago by one not cognizant of the early date of the transept system.¹⁵⁹

An examination of the newly-enlarged nave (Fig. 14) shows such striking analogies with the disposition of the western arm of Saint-Sernin at Toulouse that there can be no doubt but that a relationship exists between the two monuments. The three-aisle plan, the cruciform piers with *dosserets* in the re-entrant angles between the double aisles, the wall responds composed of an engaged column flanked by *dosserets*, the barrel vaulting buttressed by quadrant vaults, and the high-inner, low-outer aisle adjustment are all similar in the two monuments of the Pilgrimage School. Only the presence of a genuine tribune at Saint-Sernin, and a slight variance in the nave piers differ from the arrangement at Saint-Martin. These differences are readily explained and contribute to a clarification of the relationship between the two structures. The analogies must be accounted for in one of two ways. Either the nave of Saint-Martin is under the influence of Saint-Sernin or the latter sought inspiration from Saint-Martin in the development of its western arm.

It has been shown that the absence of a true triforium gallery in the nave of Saint-Martin resulted from the necessity of removing the original groin vaults of the inner aisle to permit the substitution of a range of piers for the former walls at the time the outer aisles were added. The desire for the high inner aisle effect, which not only is apparent at Cluny and becomes the customary spatial solution to the juxtaposition of two aisles, but also became the accepted organization for three-aisled Romanesque churches of the School of the West, recommended the continued omission of the tribune floor and aisle vaults. Out of a desire to retain the existing nave arcades and tribune arches, and for the sake of harmony with the untouched tribunes of the transept, the original nave-wall elevation was preserved intact except for the clearstory which the new barrel vaulting eliminated. At Saint-Sernin, on the other hand, the adjustment of low outer aisle to high inner aisle is managed more surely; as at Cluny, the nave arcades are of a height which express truthfully the scale of the inner aisles, and a true tribune surmounts them. The greater perfection of Saint-Sernin in organizing the volume relationships, taken in conjunction with the close analogies in plan, vaulting system, and supporting elements, strongly suggests that it is inspired by the experimental adjustments at Saint-Martin.

This assumption is further borne out by a comparison of the nave pier-forms in the two monuments. At Saint-Martin the conglomerate support containing elements introduced

158. Conant, *Santiago*, p. 23.

159. Since Aymery visited Santiago between 1122 and 1135, his statement of comparison was presumably made after the fire at Saint-Martin in 1122. Since he makes no reference to this and seems to refer to the analogies of the vaulting system with that of Santiago, it may be assumed that the fire damaged chiefly the nave roof and did not destroy the vaults. The documents mention only a part of

the nave being affected. The reference of Picaud implies that Saint-Martin was vaulted more or less completely, for had the roof still been largely of wood, no such definite comparison with Santiago would have been made. It may be inferred that the vaulting system was not seriously damaged by the fire of 1122 and was sufficiently intact to occasion a comparison with that of Santiago.

at different periods results in a section without exact parallel anywhere to the writer's knowledge. At Saint-Sernin, where there is an exact reproduction of the other piers and wall responds, in the nave piers there is precisely the regularization and systematization of the asymmetrical pier-form of Saint-Martin that one would expect in a slightly later monument taking its inspiration from a less perfect experimental structure.

A comparison of the plans of the nave piers in the two churches reveals a logical evolutionary process. At Saint-Martin the primitive piers of rectangular section upheld arches of two simple orders, the latter springing from the impost moulding without any expression of the double archivolts in the mass of the pier below (Fig. 2). For the sake of achieving harmony with the new pier range between the aisles, and to provide supporting elements for the quadrant vaulting above, a pilaster flanked by *dosserets* had been added to the original pier on the aisle side and, like the analogous elements in the piers opposite, had been carried up into the former tribune space through the area formerly occupied by the conoids of the groin vaulting.¹⁶⁰ On the nave side the original piers were modified by the addition of engaged colonnettes destined to support the transverse ribs of the barrel vaulting.

At Saint-Sernin, although the same pier-form generically speaking was adopted for the nave arcade, the core was brought into a more expressive relation with the double archivolts above. The outer order continued to find support in the main massif of the pier, but the inner order was sprung from a pilaster added to the core within the nave arcade. The impost moulding was carried around the pier, as is characteristic of the twelfth century. The columnar wall shaft was retained as at Saint-Martin. Thus the pier shows the improved articulation that one would expect in a form evolving from an earlier more rudimentary example, and again suggests that Saint-Martin is the prototype and Saint-Sernin is the derivative.

Rendering the theory possible is the date of the nave of Saint-Sernin. M. Aubert assigns everything west of the eastern wall of the transept to the twelfth and thirteenth centuries.¹⁶¹ The eastern portions of the nave, therefore, would be about contemporary with the widened nave at Saint-Martin. Much has been said of the analogies between Saint-Sernin and Santiago de Compostela. Whether or not one is an imitation of the other, they both utilize the same architectural formula modified in expression by regional influences. The chief difference between the two, aside from the building material, is the presence of five aisles at Saint-Sernin and three at Santiago. It is plausible to believe that Raymond Gayrard, the builder of the former, desirous of outdoing Santiago, promptly adopted the five-aisle plan then in process of construction at Saint-Martin, along with its pier-forms which are likewise different from those at Santiago. Just as his predecessors had sought inspiration from the transept and chevet of Saint-Martin, so Gayrard was adapting to his own requirements the new dispositions then being realized in the western portions of Saint-Martin.

The nature of the façade of Saint-Martin in the early twelfth century is difficult to ascertain. On the parallel of the façade of Saint-Sernin where flanking towers at the ends of the double aisles seem to have been planned as early as the end of the eleventh century and subsequently hidden by two others in the middle of the twelfth,¹⁶² it is safe to conjecture that analogous flanking towers were planned and partially executed at Saint-Martin. Indeed vestiges of at least one were apparent in the base of the north tower which no longer exists (Fig. 14). There are indications that only the lower portions of the towers

160. Cf. the analogous pilasters in the tribunes of Saint-Sernin at Toulouse.

161. *L'église Saint-Sernin de Toulouse* (Petites mono-

graphies des grands édifices de la France), Paris, 1933, pp. 6-10.

162. *Ibid.*, pp. 8 and 53.

were completed in the early twelfth century, the balance of the elevations being early Gothic of about 1175. The Jacquemin plan depicts the north tower as containing within its ground stage a chamber covered with a vault sustained on radiating ribs springing from engaged wall columns (Fig. 12). On the parallel of the ribbed vault of Moissac, an early twelfth century date is indicated. Furthermore, the plan designates the tower as *la vieille tour*, an implication that it is older at least in part than its companion. The western side shows an unusual bow front, although the plan of 1762 depicts it with square plan and with triple buttresses similar to those of the Tour de l'Horloge. Jacquemin has evidently drawn it at ground level and indicated the oldest part of the tower, while the higher Gothic section is depicted in the other plan.¹⁶³

Strangely enough, Jacquemin depicts the south tower merely as a square with no indication of its internal disposition (Fig. 12). Although the tower is extant, later constructions render it virtually impossible to determine the nature of its lower portions, and Jacquemin evidently experienced the same difficulty in gaining access to its ground stage. It is probable that the three buttresses on the west and south faces rest upon a great square plinth and that it is this level that is represented by him. If the curious plan published by Grandmaison¹⁶⁴ and based in part on the anonymous plan attached to Chalmel's manuscript history of Saint-Martin can be trusted, the internal arrangement of the ground stage is similar to that of the north tower and may therefore be as early. The Gothic façade which was erected between the towers later in the twelfth century effectively obliterates whatever indications there may once have been of the original treatment of the interval between the towers.

A fire in 1122 or 1123 damaged Saint-Martin and much of Châteauneuf at a time when disorder was prevalent as a result of the conflict between the people of the *bourg* and the Chapter of Saint-Martin, which was the ruling body. Both Nobileau¹⁶⁵ and Vaucelle¹⁶⁶ imply that permanent restoration of the damage was not made until the late twelfth century.¹⁶⁷ Temporary repairs prior to this time would be explained partly by the fact that the issues of the struggle between the people and the Chapter were not settled until Louis VII granted the bourgeoisie a communal charter, and partly by the general decline of architectural activity in Touraine in the twelfth century. By this time the Gothic system of construction had penetrated Touraine and it is not surprising to find the canons of Saint-Martin utilizing the advantages of the new style in carrying out a long-needed rehabilitation of the upper portions of their church.¹⁶⁸ The campaign involved replacement of the barrel vaulting and its quadrant-vault abutment in both the transept and the nave (with attendant improvement in the illumination of the church), and the construction of the façade with its flanking towers.¹⁶⁹ It will be the aim of a later article to deal with the Gothic alterations which resulted in the transformation of much of the church and produced one of the most distinguished façade designs of the early Gothic period.

163. Cf. the octagonal towers of Saint-Vincent at Macon which Virey dates in the eleventh century (*Les églises romanes de l'ancien diocèse de Macon*, Macon, 1935, p. 321 and pl. xvii).

164. Grandmaison, "Tours archéologique," *Bulletin monumental*, xl, 1874, p. 147.

165. *La collégiale de Saint-Martin de Tours*, Tours, 1869, p. 6.

166. *La collégiale de Saint-Martin*, p. 394.

167. Jean de Marmoutiers, author of *L'éloge de la Touraine*, who wrote in the last quarter of the twelfth century, relates that in 1175 the nobles and chief bourgeoisie began to rebuild Saint-Martin which was in a deteriorated condi-

tion from fire and age. Since no conflagration is recorded between 1122 and 1175, one would be justified in inferring that the ravages of the fire of 1122 had not been permanently corrected in the interval.

168. Although the fire of 1122 was probably confined largely to the wooden roofs above the barrel vaults, damage to the masonry of the vaulting would also result. Temporary repairs seem to have sufficed until the Gothic reconstruction.

169. The date of this transformation must have been from about 1160 to 1175. Cf. the introduction of Gothic vaulting into Saint-Martial at Limoges (Charles de Lasseterie, *Saint-Martial*, pp. 304 ff.).

The study of the available data has thrown considerable light on the successive states of the church of Saint-Martin. In summary, a brief description of each phase will serve to draw together from the scattered evidence the conclusions derived therefrom, and give a general, though necessarily tentative, idea of the dispositions as revealed by present knowledge.

Of the church of 903-918 little is definitely known except that it possessed the first developed ambulatory with radiating absidioles in mediaeval architecture and was an aisled rather than a hall-type structure. The transept had no chapels on its eastern wall. The nave and aisles were covered with wooden roofs, and a solid apsidal wall separated the apse from the ambulatory, except for an axial arch or hagioscope. The piers of the nave arcade were presumably of rectangular section, and it is possible that the cores of the later compound supports are vestiges of this church incorporated in the early eleventh century structure.

The church of Hervé, dedicated in 1014, can be more completely restored. Some three hundred feet in total length, the wooden-roofed nave was flanked by single, groin-vaulted aisles surmounted by tribunes. The piers were of rectangular section, possibly survivals in part from the earlier church. A portal gave access to the north aisle. Towers of some form, perhaps turrets, connected by a westwork, graced the façade. The deep wooden-roofed transept, like the nave, was provided with aisles and tribunes, and across each end extended an open shelf-gallery supported on two arches resting on a central column. On the east wall of each arm of the transept were two chapels each of two stories, the lower entered from the aisle and the upper from the triforium gallery. The piers of the transept were of square core with an engaged colonnette on each face, that on the inner side extending up the wall to the top of the clearstory. The crossing piers were probably of cruciform section and upheld a cage-like lantern with wooden roof. The choir, similar in elevation to the transept and covered with a wooden roof, terminated in a chevet which was superposed on the foundations of the earlier church and characterized by ambulatory, five radiating chapels, apsidal arcade, and perhaps an arcaded triforium and clearstory.

Alterations in the middle of the eleventh century introduced barrel vaulting with quadrant-vault abutment into the transept and presumably into the choir. Preparation for a vaulted crossing tower necessitated the reconstruction of the crossing piers and those in the transept contiguous to them. Towers were added to the ends of the transept, absorbing the transverse end-galleries and projecting externally as tower-porches. In the early twelfth century the western arm of the church was expanded from three to five aisles. Barrel vaulting was introduced into the nave and buttressed by quadrant vaults in the former tribunes which were at this time thrown into one volume with the inner aisles by the omission of the groin vaults that originally covered the latter. Suitable members were added to the nave piers to enable them to provide support for the ribs of the nave vaulting and its abutment. The original portal of the north aisle was rebuilt in the same relative position in the wall of the outer aisle.¹⁷⁰ A vaulted crossing tower, possibly a lantern, replaced the former cage-tower. Of the two towers planned for the western façade at least the north one was actually begun.

Inadequate repairs following the fire of 1122 gave rise about 1160 to a campaign of rehabilitation which resulted in the replacement of the barrel vaulting and its abutment by Gothic ribbed vaults in square bays. The western towers were at this time completed,

170. For Châtel's description of the sculpture on this portal, see Vauzelles, *op. cit.*, p. 396.

together with a connecting façade of great beauty, and the original belfries of the transept towers were replaced by loftier stages necessitated by the height of the Gothic roof.

Subsequent alterations resulted in the replacement of the Romanesque choir and apse by a Gothic chevet in the thirteenth century, the addition in the following century of chapels between the wall buttresses on the south side, and the construction of a fourth stage on the Tour Charlemagne (Figs. 2, 3, 12). In this state the venerable church of Saint-Martin existed until the end of the eighteenth century when, like so many distinguished companions, it succumbed to the ravages of time and the indifference of man.

THE UNIVERSITY OF ROCHESTER

DÜRER AND THE HERCULES BORGHESE-PICCOLOMINI

BY A. M. FRIEND, JR.

I—DÜRER AND THE APOLLO BELVEDERE

INSTANCES of the copying or adaptation of specific antique statues by the major artists of the Renaissance are remarkably rare. So it was a matter of exceptional interest when, in 1881, Lehrs¹ and Thode² pointed out what seems to be an obvious similarity between Dürer's Apollo drawing in the British Museum (L. 233) (Fig. 2) and the famous statue of Apollo in the Belvedere of the Vatican. The assumed derivation of the pose of the Dürer nude from the antique statue becomes still more important by reason of the close relation of the London drawing, together with several others of nearly identical pose, to the figure of Adam, the perfect male, in the German master's great engraving of Adam and Eve (B. 1), the fruit of his earliest studies in human proportions. Indeed the several "Apollo" drawings still retain the vestiges of the lines and compass points whereby Dürer at first sought to construct the human form by the means of geometrical figures.³

But even in the very year when Lehrs published the relationship of Dürer's drawing to the statue, any connection between the Adam and Apollo Belvedere was denied by Grimm⁴ who could say at the end of his short article: "Die Antike scheint für Dürer nicht existiert zu haben." Later Thode⁵ taking cognizance of Grimm's objection reaffirmed the similarity of the London drawing and the Vatican statue. The comparison, moreover, had sufficient compulsion in itself to be so generally accepted that Wölfflin in 1905 in the first edition of his famous book on the Art of Dürer⁶ can speak of the connection as passing for a foregone conclusion though he himself points out that the similarity between the engraving and the statue is, indeed, only a very approximate one.

In 1921 a much more detailed discussion of the relation of Dürer with antique art was published by Hauttmann⁷ in which he sought to derive the pose of the Apollo drawings not from the Apollo Belvedere but from a stone relief representing Mercury which was once in the possession of Conrad Peutinger and is now in the Maximilian Museum at Augsburg. However, it was Panofsky who, in a comprehensive article entitled "Dürers Stellung zur Antike,"⁸ showed, for the first time clearly, the relation of Dürer's male nudes to the monuments of antique art which he may have known. From Panofsky's comparisons emerges sharply the fact that the "Apollo" drawings are much closer in pose to the Apollo Belvedere than to the Mercury relief of Peutinger. The essence of the pose of the Vatican statue is the peculiar *gliding movement* which distinguishes it from almost all other classical statues—a movement which is caught remarkably well in the earliest drawing we have of the Apollo

1. Max Lehrs, "Zu Dürers Studium nach der Antike," *Mitteilungen des Instituts für Oesterreichische Geschichtsforschung*, II, 1881, p. 285.

2. Henry Thode, *Die Antiken in den Stichen Marcantonio's, Agostino Veneziano's, und Marco Dente's*, Leipzig, 1881, p. 2.

3. Ludwig Justi, *Konstruierte Figuren und Köpfe unter den Werken Albrecht Dürers*, Leipzig, 1902, pp. 5-14.

4. Hermann Grimm, "Bemerkungen über den Zusammenhang von Werken A. Dürer's mit der Antike," *Jahrbuch der Königlichen Preussischen Kunstsammlungen*, II, 1881,

pp. 189-191.

5. Henry Thode, "Dürers 'Antikische Art,'" *Jahrbuch der Königlichen Preussischen Kunstsammlungen*, III, 1882, pp. 106-112.

6. Heinrich Wölfflin, *Die Kunst Albrecht Dürers*, Munich, 1905, p. 102.

7. Max Hauttmann, "Dürer und der Augsburger Antikenbesitz," *Jahrbuch der Königlichen Preussischen Kunstsammlungen*, XLII, 1921, p. 48.

8. Erwin Panofsky, "Dürers Stellung zur Antike," *Jahrbuch für Kunstgeschichte*, I (xv), 1921/22, pp. 54, 55.

Belvedere on folio 64 of the famous Codex Escurialensis (Fig. 1). This movement is exactly what distinguishes Dürer's Apollo drawings (Fig. 2) and what is totally lacking in the Mercury relief used by Hauttmann in his comparison.⁹ The movement of the Apollos is a very different matter from the common Polyclitan *stance*—one leg supporting and one leg free—which is so frequently used in antique statues.

By Panofsky the relation between the Apollo Belvedere and the Dürer drawings would seem to have been demonstrated, but unfortunately two of the authors of the most recent publications of these drawings have taken it to themselves to deny anew that any such relation could exist. One of these is Winkler whose comprehensive corpus of Dürer's drawings is likely to become the standard work.¹⁰ His treatment of the Apollo and proportion drawings is, however, based primarily on the book of Eduard Flechsig. The second volume of Flechsig's monumental study of Dürer,¹¹ a volume devoted exclusively to his drawings, contains a large scale special treatment of those relating to human proportions. These drawings are, all of them, arranged in groups in chronological order according to Flechsig's ideas of the development of this branch of Dürer's artistic activity. One must admire the meticulous care and detail with which these researches are conducted however much one may marvel at the conclusions which result from the methods of reasoning employed by the author. We will be chiefly concerned with his attempt to prove that the Apollo Belvedere can have nothing to do with the Dürer drawings.

After recounting briefly the rise of the identification in the works of Lehrs and Thode, Flechsig starts by acknowledging the similarity between the statue and the London drawing. He says: "Only one thing is correct: the Dürer Apollo in London resembles the Apollo Belvedere in certain respects. But the conclusion from this is false."¹² However the similarity is great enough to compel Flechsig to investigate more fully than any one else how Dürer might have known the statue and very little evidence has escaped his research. At the same time he is intent upon maintaining a date of 1500–1501 for the whole series of Dürer's Apollo drawings. So the problem limits itself in his mind to the possibility of Dürer's knowing the statue by the year 1500. Since this period is before any of the engravings of the Apollo Belvedere and since there is no evidence that Dürer visited Rome,¹³ it follows that he could have known the statue only by means of drawings of it which might have been made before 1500. Of such only two, according to Flechsig, survive to us. These, showing the Apollo from two different angles are now on folios 53 and 64 of the Codex Escurialensis which is a notebook, preserved in the library of the Escorial, made in the workshop of Domenico Ghirlandaio and filled with sketches of antiquities and other works of art which existed in Rome. But this book of drawings cannot be accurately dated as Flechsig rightly observes. One of the drawings on folio 50 verso shows an inscription ROMA MCCCCLXXXI on a cartouche in the midst of ornament, a fact which has caused Egger,¹⁴ the editor of the Codex, to ascribe the collection to a period about this year. However this inscription might have been copied from an earlier drawing, nor does it follow that all the drawings in the volume must be of the same date. Although for stylistic reasons

9. Hauttmann, *op. cit.*, fig. 7.

10. Friedrich Winkler, *Die Zeichnungen Albrecht Dürers*, Berlin, 1936–39; vol. I, Nos. 261–264 and pp. 172–173; vol. II, Nos. 419–422 and pp. 101–102.

11. Eduard Flechsig, *Albrecht Dürer*, II, Berlin, 1931, pp. 144–201.

12. *Ibid.*, p. 167.

13. Hans Rupprich, *Wilibald Pirckheimer und die erste Reise Dürers nach Italien*, Vienna, 1930, p. 42. For the refu-

tation of Rupprich's notion of the trip to Rome, cf. A. Weixlgärtner, *Mitteilungen der Gesellschaft für Vervielfältigende Kunst* (Die Graphischen Künste, supplement), LIII, 1930, p. 59; Alice Wolf, *Die Graphischen Künste*, N.F., I, 1936, p. 138; E. Panofsky, "Zwei Dürer-Probleme," *Münchner Jahrbuch der Bildenden Kunst*, N.F., VIII, 1931, p. 2, notes.

14. Hermann Egger, *Codex Escurialensis*, Vienna, 1905, pp. 6–56.

the Escurialensis must have been made about the turn of the century, there is actually no proof that the two drawings of Apollo Belvedere contained in it must date before 1500.

But Flechsig goes further to investigate the data of the actual discovery or early history of the Apollo statue itself. The first drawing of the statue in the Escurialensis, folio 53, has the subscription "nelorto disapiero inuinhola," i.e., in the garden of San Piero in Vincula.¹⁵ This refers to the palace of Cardinal Giuliano della Rovere who will become Pope Julius II in 1503. The same information concerning the statue is given in a collection of inscriptions (Codex Chisianus I. V. 168) which must date between 1497 and 1503.¹⁶ Later when the Cardinal became Pope the famous statue was taken to the Belvedere in the Vatican. As to the actual excavation or discovery of the statue we know nothing at all.¹⁷ The description in verse of the various antiquities of Rome made about 1500 by the Milanese painter who calls himself the Prospektivo Milanese does not mention the Apollo statue nor the collection of Giuliano della Rovere although he seems to have visited other collections of antiques in the city.¹⁸ Thus there is no evidence to prove even the existence of the statue of Apollo in the garden of the Cardinal before the fatal year 1500. However on the bases of this same evidence as adduced by Flechsig it is equally impossible to prove either that the drawings in the Codex Escurialensis are *not* earlier than 1500 or that the Apollo Belvedere did *not* stand in the garden of Giuliano della Rovere before this date. The evidence just does not give a result for this date. The possibility is, therefore, still completely open that both the drawings and the discovery of the statue antedate 1500. We are consequently quite unable to accept the more than startling conclusion that Flechsig is now to make. After pointing out that the Prospektivo Milanese mentions "not one syllable" about the Apollo Belvedere, but without realizing the fact that the Milanese painter also fails to mention other important antique statues already standing at his time in Rome, as, for example, the Hercules in the Piccolomini collection, Flechsig writes: "From this one can conclude that at the time the Prospektivo wrote, about 1500, the Apollo did not as yet stand in the garden of the Cardinal and furthermore that it was not yet to be found in Rome at all."¹⁹ On this conclusion it would be of course quite impossible for Dürer's Apollo drawings dateable in 1500-1501 to derive from an Apollo statue unknown at that time.

That the statue was unknown does not follow, however, from an argument which merely shows that we cannot prove it to have been known. It is on such a non sequitur as this that the denial of Dürer's adaptation of the Apollo Belvedere rests. The attempt by Flechsig, approved by Winkler, to sever the connection between the Vatican statue and the Dürer Apollo drawings must be regarded as a failure. Significantly enough at the very end of his discussion of the subject Flechsig harks back again to the unforgettable similarity of the London Apollo drawing and the Apollo Belvedere: "A similarity between the Dürer Apollo and that of the Belvedere is doubtless present, especially in the striding posture, but it is a purely accidental similarity such as the London Apollo has in common also with other antique statues which Dürer could have seen neither in the original nor in copies."²⁰ But with *what* other antique statues regardless of whether or not Dürer saw them? Certainly not with the Peutinger Mercury or with the bronze athlete in Vienna, from Helenenberg near Klagenfurt,²¹ both of which he goes on to describe and neither of which is in a pose of movement at all. Today we have a fairly large repertory of antique statues and statuettes

15. *Ibid.*, p. 130 (Michaelis).

16. Christian Huelsen, "Zum Belvederischen Apollo," *Archäologischer Anzeiger*, 1890, p. 48, note 2.

17. Egger, *op. cit.*, p. 131 (Michaelis).

18. G. Govi, *Atti della reale Accademia dei Lincei*, Ser. II,

Vol. III, part three, 1875-1876, pp. 39-66.

19. Flechsig, *op. cit.*, II, p. 173.

20. *Ibid.*, II, p. 177.

21. Panofsky, "Dürers Stellung zur Antike," p. 82, fig.

41.

from which to judge the number and variety of poses in classical art. And yet the pose of the Apollo Belvedere with the striding motive noted by Flechsig himself rarely occurs among them. In Dürer's time the number of classical statues known was very few indeed but the Apollo Belvedere, so close in pose to Dürer's Apollo drawings, is, as Flechsig has unconsciously allowed us to see, quite possibly one of these. Rejecting the easier solution to account for the undeniable similarity, Flechsig proceeds to demand from history what in 1500 was, as he says, unknowable for Dürer and what in 1943 is still non-existent. Until another classical statue as close in pose as the Apollo Belvedere to Dürer's drawings is produced, we can hold with confidence that it actually was the Vatican statue which inspired the earliest male proportion studies unless we hold that in these matters Dürer had no connection with the antique at all.^{21a} A recent discovery of Dürer drawings, known to Flechsig but not seen in its full significance, will allow us to identify, as I think, another one of these antique statues which Dürer actually did know. The pose and proportions of this statue are, however, very different from those of the Apollo Belvedere but they have equally inspired Dürer in the creation of another type in the proportion studies to be matched with the series of the drawings of Apollo.

II—THE LEMBERG DRAWINGS

In 1927 H. S. Reitlinger published a notice²² of a forgotten collection of some twenty-five Dürer drawings which had been hidden away in the Lubomirski Museum in Lemberg, Galicia. Among these was a male proportion drawing on the back of which Dürer had traced its transformation into a man with a lion. When found the proportion side of the sheet was pasted over with a piece of old paper so the first photographs had to be taken against the light. From these the first reproductions were made for the Lippmann Dürer corpus (L. 740) and for the Tietze *Verzeichnis*.²³ In the first instance the figure is reversed, in the second the lion shows through from the back of the sheet. In 1929 the Lemberg drawings were beautifully published by Gebarowicz and Tietze²⁴ and for the first time the male proportion drawing was reproduced after being freed from its paper incumbrance. The reproductions for this article (Figs. 4 and 6) have been taken from the plates in Winkler's new corpus of Dürer drawings.²⁵

The sheet (26.8×14.2 cm.) shows a nude man of very muscular build and thickset proportions who stands with the right leg supporting him while the left leg is bent back at the

^{21a}. On this point: Flechsig (II, p. 181), rejecting the direct influence of the antique, would like to derive Dürer's Apollo figures from the nude man holding the cornucopia in Mantegna's engraving, the Bacchanal with the Wine Press (B 19). The pose of this figure is, he thinks, like the Apollo Belvedere. Winkler (I, pp. 172–173, 180, 184), seemingly independently (I, p. 195, additional note to No. 261) makes much of the same derivation. Any simultaneous comparison of the London Apollo, with the Mantegna print and with the Apollo Belvedere in the Escurialensis is enough to show how very much closer Dürer's drawings are to the statue than to Mantegna's nude figure. As Flechsig points out the legs are similar although I would hardly describe the man in the print as striding. But nothing else in the print is the same. The torso, represented as if seen from below, is twisted in a rather violent contrapposto with the right shoulder drawn back. The right arm, hidden in shadow, holding the cornucopia, is consequently close to the body. The left shoulder is thrust forward, the left arm raised to reach for the vine leaves at which the head, thrown back, looks up. All this is a good display of Mantegna's power in foreshortening and perspective. There is, then, no connec-

tion between this twisted pose seen from below and that of the Apollo drawings innocent equally of the contrapposto and the perspective from below. Dürer, however, seems to have known the Mantegna print since in the early drawing in the Uffizi (I 633) he adapts the pose of the nude figure with its contrapposto and perspective. This comparison has really got something to it but Winkler strangely enough is lukewarm about it (I, p. 64) perhaps in order to be categorical concerning his derivation of the Apollo drawings from the same Mantegna figure later on. He can even suggest tentatively that Dürer's London drawing was already copied by 1495 from the print (I, p. 173). Thus, by his denial of the connection with the Apollo Belvedere, Winkler forces himself to assert instead, what is very close to visual nonsense.

22. H. S. Reitlinger, "An Unknown Collection of Dürer Drawings, *Burlington Magazine*, L, 1927, pp. 153–159.

23. Hans Tietze and E. Tietze-Conrat, *Der junge Dürer*, Augsburg, 1928, Nos. 169–170.

24. M. Gebarowicz and H. Tietze, *Albrecht Dürer's Zeichnungen im Lubomirski-Museum in Lemberg*, Vienna, 1929, p. 16, No. 5 (Inv. No. 8296), Pls. VII–VIII.

25. F. Winkler, *op. cit.*, II, Nos. 419–420.

knee. The left foot is placed in advance of the right and is firmly planted on the ground. Later, when Dürer used this man for the reverse of the sheet, he drew a new left foreleg, making it come outward. The right arm is unfinished but was intended to rest on the buttock behind the hip. In his left hand the man holds a mirror which he contemplates with his head inclined. The head is beardless and hairless as is frequent in Dürer's proportion studies. The drawing is very sensitive and there are many *pentimenti* especially on the hips with their rolls of muscle. On the body are drawn freehand a number of proportion lines with affixed arabic numerals giving the divisions of the height of the figure. An incised vertical axis line touches the right ankle and calf, the genitals and the pit of the throat. Along this line on the torso are numerous pricks of the compass for the circles which determined the contours of the body (Fig. 8). On the back of this drawing Dürer has traced the same form in reverse, changing the leg, as mentioned above, adding a lion whose head is grasped by the arm, now lowered, which on the other side held the mirror. The incomplete arm now rests with the hand on the hip (Fig. 6). The text of the Lippmann plates suggests that this figure is intended to be Samson, no doubt because of the lion. On the other hand Tietze, following Panofsky's lead in connection with the London Apollo drawing, is of the opinion that the motifs of the mirror and the lion point to the type of the god Sol.²⁶ Flechsig thinks it is not proved that Dürer by means of a lion wished to turn the man into a Hercules.²⁷ The monogram of Dürer under the lion's head is authentic, according to Winkler, and done in the same ink as the rest of the drawing.²⁸

But the most interesting thing about the Lemberg proportion drawing is not its transformation on the reverse of the sheet. It is the original type itself. The heavy proportions, the exaggerated musculature, the pose with the right leg supporting the weight and the left leg free, bent at the knee with the foot squarely on the ground but set in front of the other and slightly turned out, the right arm bent with the forearm behind the hip, the head inclined to the left—all this, excepting only the left hand holding the mirror, recalls inevitably the famous Lysippian statue of the weary Hercules (Fig. 7) which exists in many replicas of which the best known is, perhaps, the huge example in Naples, signed by Glykon, and called from its previous owners the Hercules Farnese.²⁹ Of all the replicas this has the greatest muscular exaggeration to indicate the strength of the Greek hero.

Now the same questions must arise from this similarity as in the case of Dürer and the Apollo Belvedere. If the Lemberg proportion drawing is based on Lysippos' weary Hercules, then what replica of this statue could Dürer have known? How did he know it and when? It is of course impossible for Dürer to have any knowledge of the Hercules Farnese which was not excavated from the Baths of Caracalla until 1546 when it was found together with another replica of the same statue.³⁰ Among the many other surviving copies of this popular statue known today³¹ there is only one which we can show to have actually been discovered and set up in Rome before 1500—the earliest date which has been seriously suggested for any of Dürer's proportion drawings. This replica is the statue preserved at present in the Villa Borghese (No. ccLXI)³² where it decorates the room with Titian's *Sacred and Profane Love* (Fig. 7). The muscular structure of this statue is much less exaggerated than that of Hercules Farnese. The pose is more nearly upright, less drooping to express weariness. The history of the Borghese replica can be inferred from the only existing drawings of it. These

26. Tietze, *Der junge Dürer*, p. 52. Panofsky, *op. cit.*, pp. 59-65.

27. Flechsig, *op. cit.*, II, pp. 195-196.

28. Winkler, *op. cit.*, II, p. 106.

29. Brunn-Bruckmann No. 285.

30. Huelsen-Iwanoff, *Thermen des Caracalla*, p. 76. R. Lanciani, *Storia degli scavi di Roma*, II, Rome, 1903, p. 181.

31. For a list of replicas of the weary Hercules, cf. Franklin P. Johnson, *Lysippos*, Durham, 1927, pp. 197-200.

32. *Einzelauflnahmen*. Nos. 2775-2777.

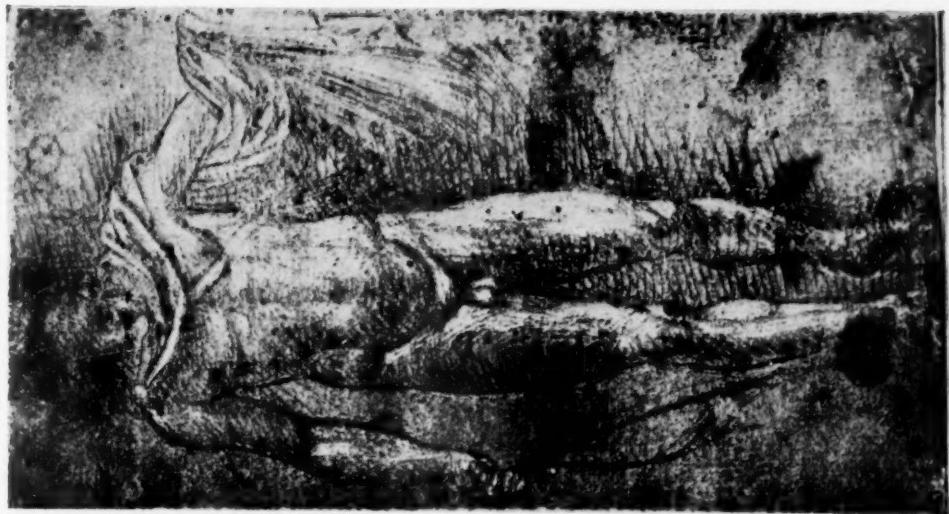


FIG. 3. Paris, Louvre (No. 9877): School of Filippo Lippi, Drawing of Apollo Belvedere

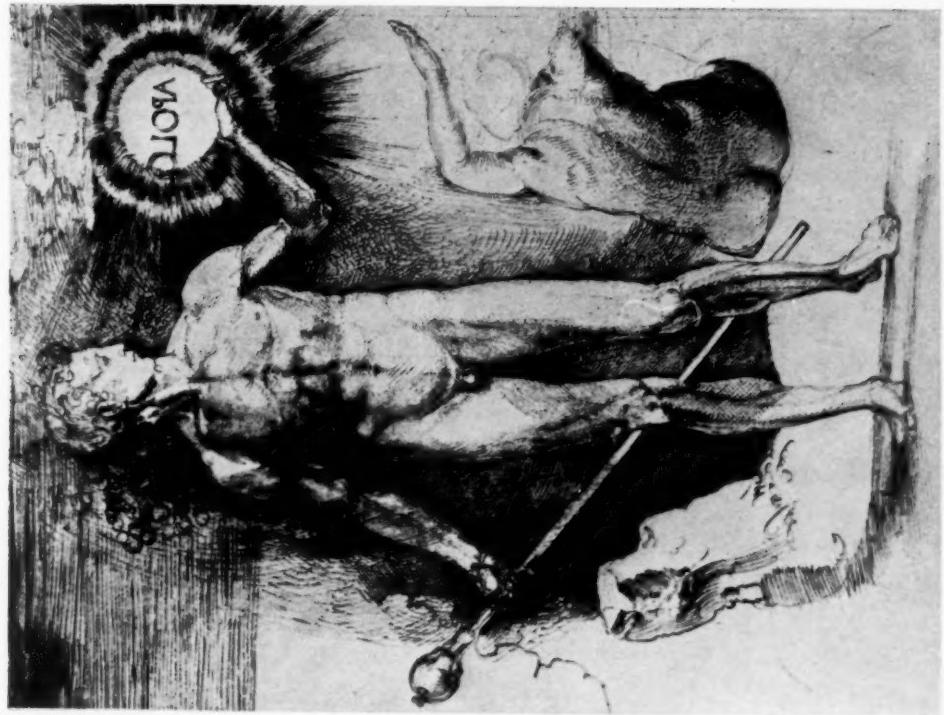


FIG. 2. London, British Museum (L.233): Drawing by Albrecht Dürer, Apollo

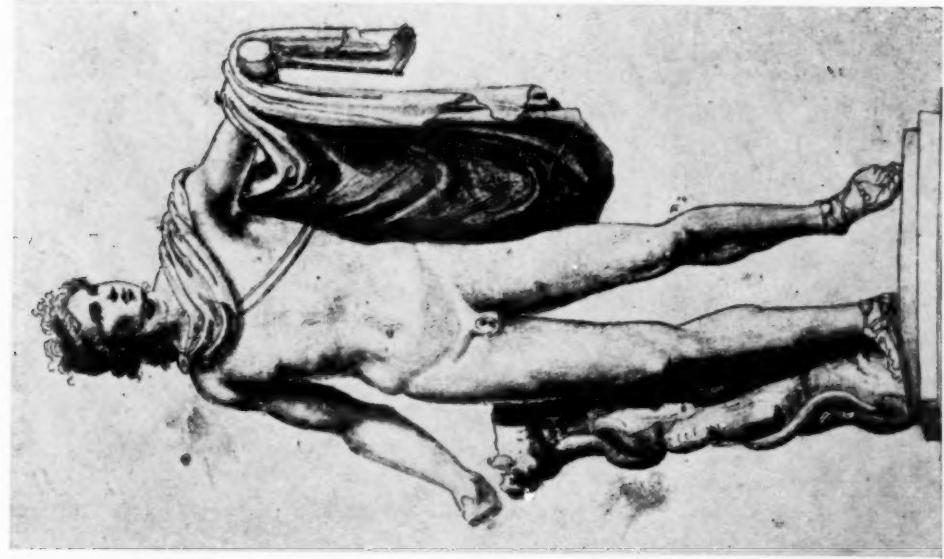


FIG. 1. Codex Escorialensis, Folio 64: Drawing of Apollo Belvedere

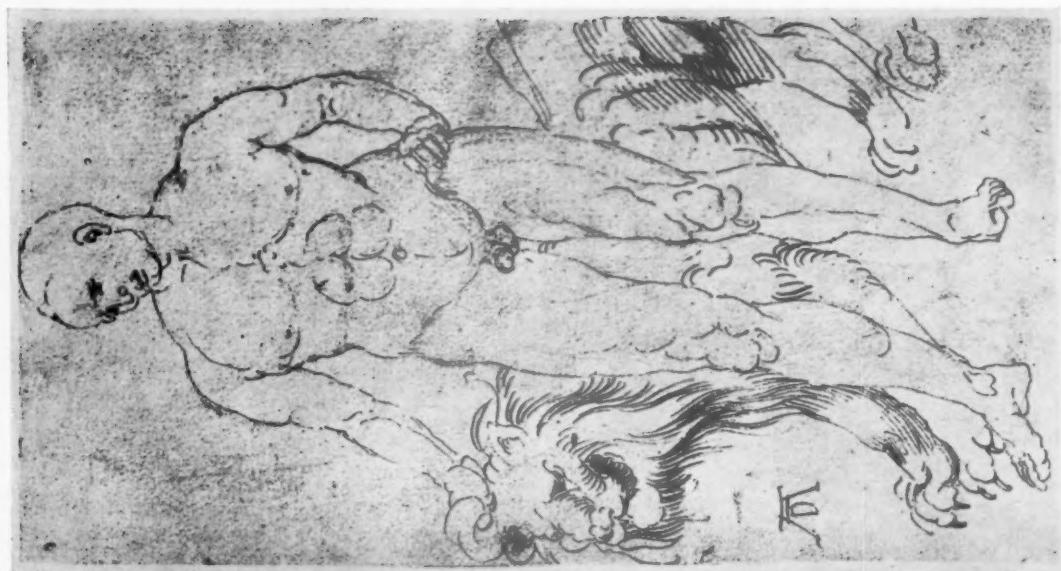


FIG. 6. Lemberg, Lubomirski Museum (L739, Reverse of L740): Drawing by Dürer

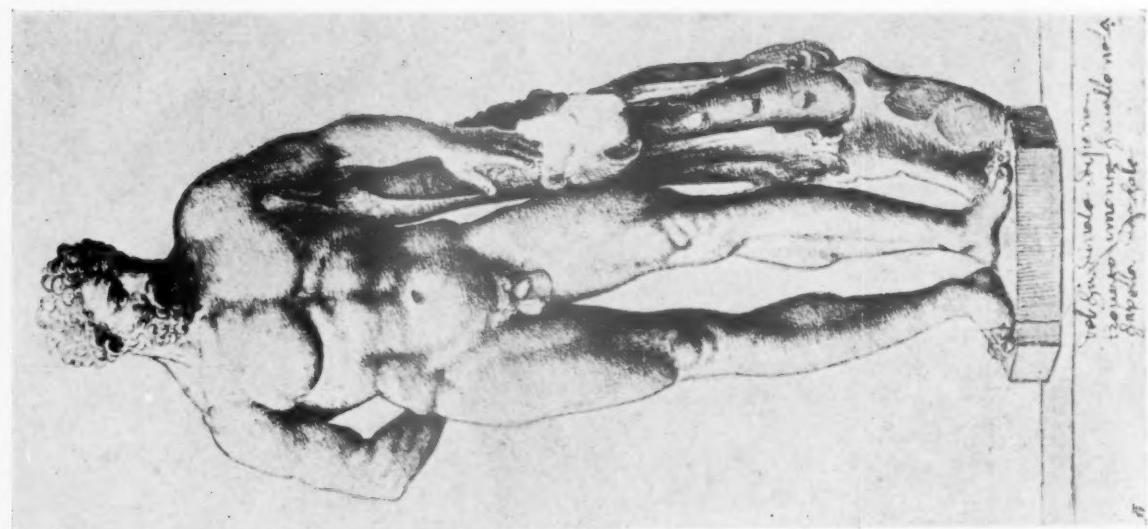


FIG. 5. Codex Escurialensis, folio 37: Drawing of Hercules Borghese-Piccolomini

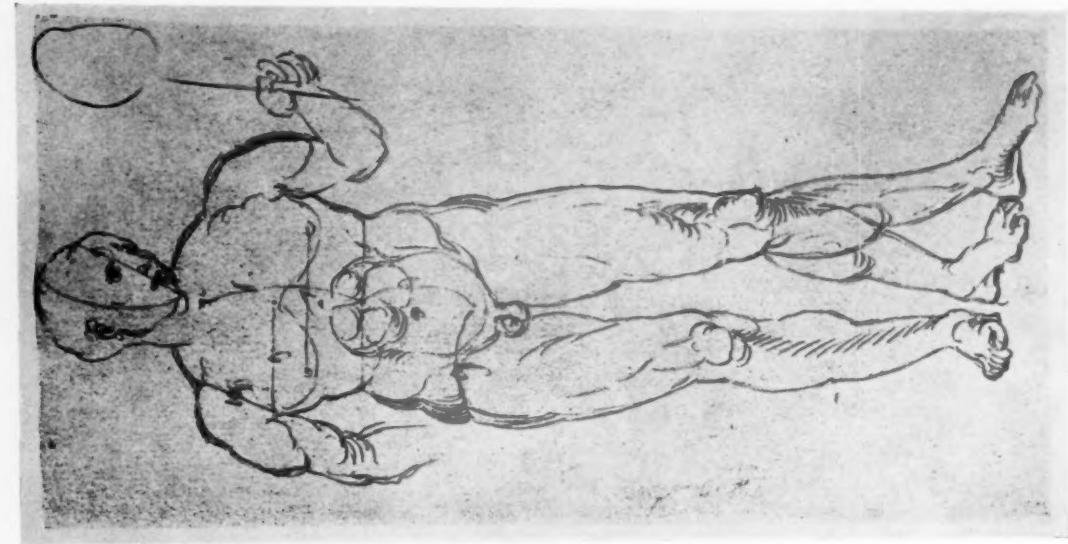


FIG. 4. Lemberg, Lubomirski Museum (L740): Drawing by Dürer

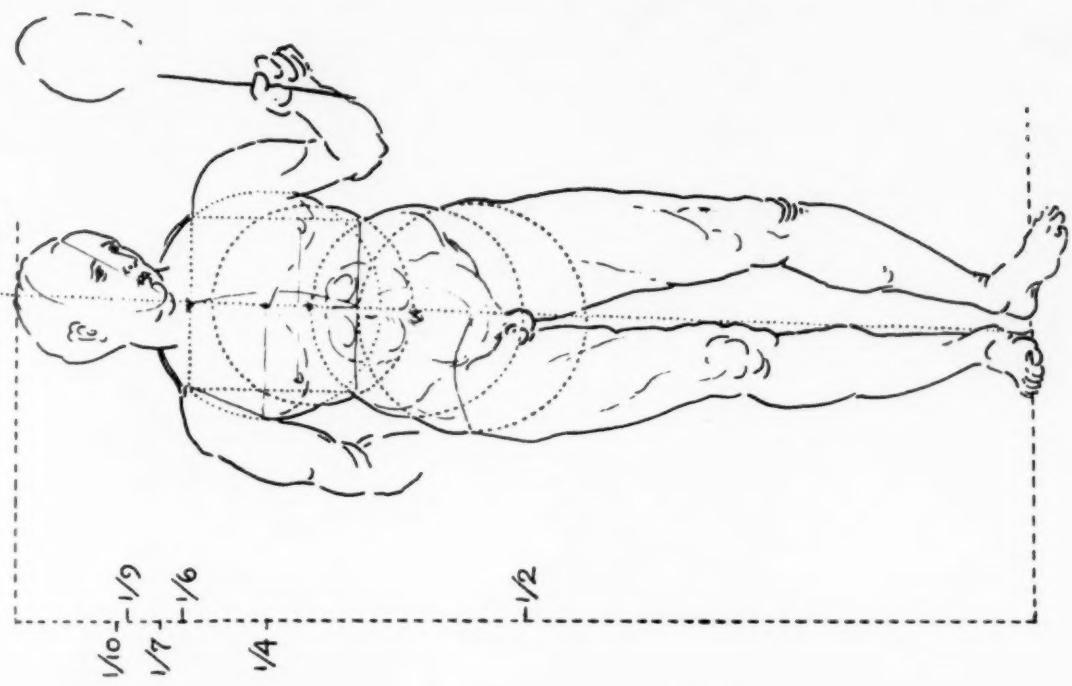


FIG. 8. Lemberg Drawing with the Construction Indicated

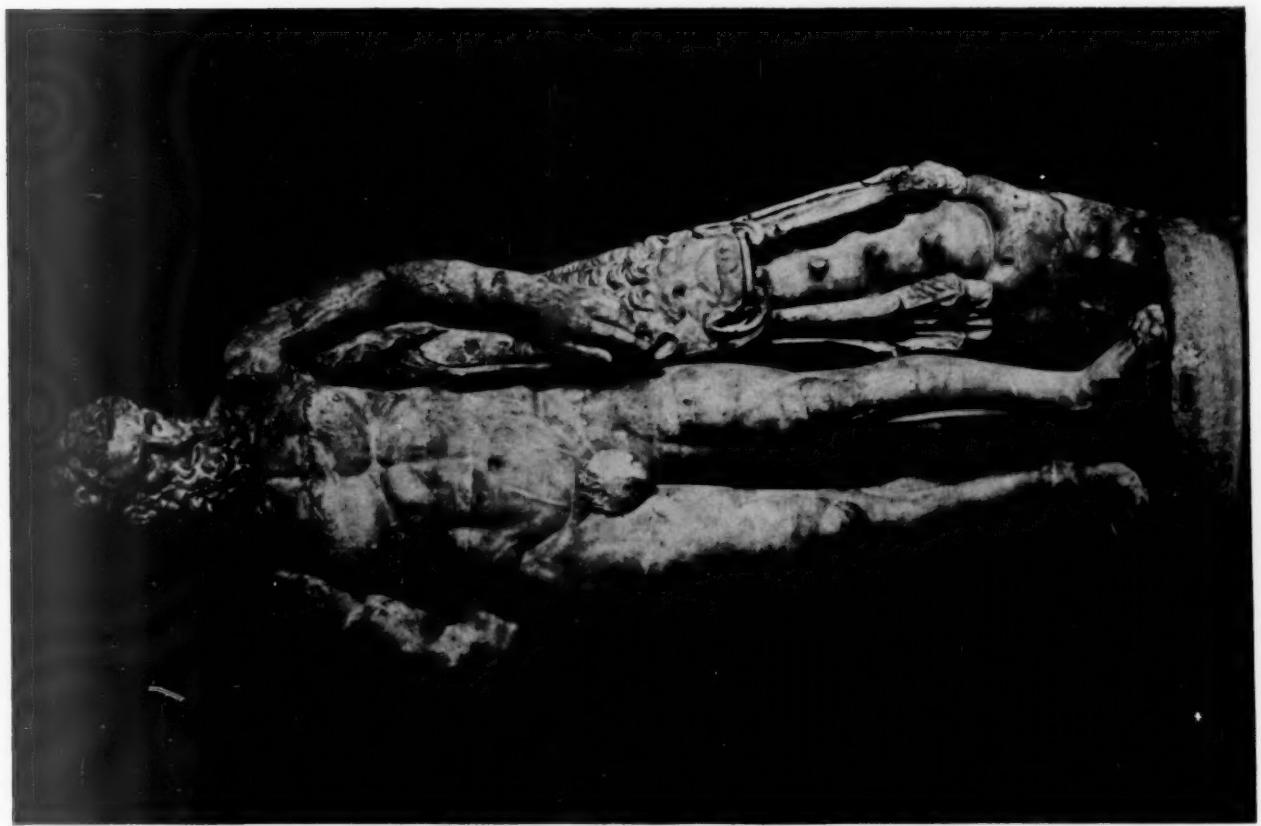


FIG. 7. Rome, Villa Borghese (No. CCLXI): Hercules Borghese-Piccolomini



FIG. 10. Grottaferrata, Badia: Fragment of Sarcophagus Lid



FIG. 12. Milan, Brera: Page from a Sketchbook of Antiquities



FIG. 9. Codex Escorialensis, Folio 34: Triton and Nereid



FIG. 11. Oxford, Library of Christ Church (H. 24): Triton and Nereid

are in the Renaissance sketch books. It is represented on sheets 8 and 9 of the Codex Cantabrigiensis (1550-1553) where it is indicated as in the collection of the Cardinal Carpi on the Quirinal. More important, the Borghese statue is copied on folio 37 of the Codex Escurialensis (Fig. 5).³³ The subscription on this drawing reads: "del chardinale disiena trouato imonte chauallo nela chapella dercholle," i.e., "belonging to the Cardinal of Siena. Found on Monte Cavallo in the chapel of Hercules." The Cardinal of Siena is Francesco Piccolomini who became Pope Pius III in the year 1503. Sometime about 1480 he built a handsome palace on the then Piazza di Siena in Rome obtaining for its decoration antique sculptures from the Colonna family including this Hercules statue as well as the group of the three Graces, which, later, he sent to his native city of Siena, where it still exists in the Cathedral Library.³⁴ The chapel of Hercules is conjectured by Michaelis to be the place on the slopes of the Quirinal (Monte Cavallo)³⁵ where the celebrated Torso Belvedere had already been found, which, also, formed part of the Colonna collection of antiques in the fifteenth century. Thus it seems quite certain that the Borghese Hercules was known and in the possession of the Colonnes and Francesco Piccolomini well before 1500.

We must realize that Dürer could know this—for his time—unique Hercules statue only by means of drawings. There were no engravings and Dürer never went to Rome. The situation is exactly the same as that for his knowledge of the Apollo Belvedere. There are drawings of both these statues in the Codex Escurialensis (Figs. 1 and 5). What is more, these two are the only male nude statues which are in the Codex,³⁶ and they are each depicted from the same angle or point of view which Dürer has used in the Lemberg and London drawings. Now if Dürer bases his proportion studies upon drawings of ancient statues, these must depict the statue from nearly exactly the same angle of view as the Dürer adaptations. It is obvious that drawings of a statue can be made from several positions—in front of or at the sides of the subject. The Escurialensis itself has two of the Apollo. The sculptural type is the same—but the pictorial types differ according to the angle. I may illustrate this by two drawings, taken from different sources, of the Apollo Belvedere. One is folio 64 of the Codex Escurialensis (Fig. 1); the other is a drawing, in the Louvre, in the style of Filippino Lippi (Fig. 3) which Parker, who first published it,³⁷ thinks is early enough in date for a possible direct connection with Dürer. In the Filippino drawing the Apollo Belvedere is seen from a position more to the left than that from which the Escurialensis is drawn. The result is that the positions of the legs and the right arm are quite different in the two drawings. In the Dürer London drawing (Fig. 2) Apollo is obviously seen from the same angle as in the Escurialensis, not from the point of view of the Filippino drawing. It is extremely unlikely that Dürer, without being able to revolve the statue before him, could or would work out any pose save that of the drawing he possessed. The Filippino drawing of Apollo Belvedere can hardly then have had any effect upon Dürer. The chance, rather, is that the drawing of Apollo which Dürer used must have been very like the Escurialensis. The same is true in the matter of the Hercules. If we compare the Dürer drawing (Fig. 4) with a photograph of the actual statue (Fig. 7) and then with the copy of the statue in the Escurialensis (Fig. 5), the stance, the stouter muscular structure

33. Egger, *op. cit.*, pp. 106 and 107 (Michaelis).

34. P. G. Hübner, *Le Statue di Roma*, Leipzig, 1912, pp. 90 and 110.

35. A. Michaelis, "Monte Cavallo," *Römische Mitteilungen*, XIII, 1898, p. 258.

36. Egger, *op. cit.* Facsimile, folios 37 and 64. The Apollo Belvedere is also depicted on folio 53 but from a different angle.

37. K. T. Parker, "Eine neugefundene Apollozeichnung Albrecht Dürers," *Jahrbuch der Königlichen Preussischen Kunstsammlungen*, XLVI, 1925, p. 252 (note 2) and fig. 4. Cf. B. Berenson, *Drawings of the Florentine Painters*, Vol. II, 1938, p. 156, No. 1382^a. Berenson also suggests David Ghirlandaio (d. 1525) but thinks the hatching is like Filippino. Flechsig ignores this drawing completely.

and the pose of the rather poor drawing in the sketch book are closer to Dürer than is the statue itself.

III—THE CODEX ESCURIALENSIS

Since the drawings of antique figures used by Dürer must show the statues from nearly the same angle as do his proportion studies and since these statues would seem to be only the Apollo Belvedere and the Lysippian Hercules, the range of speculation concerning the very drawings Dürer could have seen is actually severely limited. The fact that the collection of copies from the antique known as the Codex Escurialensis exhibits exactly these conditions must raise the difficult question of its possible relation to Dürer. Some study of the history of this codex is necessary here. On the first folio of the Escurialensis in a seventeenth-century hand is written "Libro de debuyos o antiquedades | De mano | D Di° de M°." This refers to Don Diego Hurtado de Mendoza (1503–1575) who was the envoy of Charles V at Venice and who formed the collection of Greek manuscripts which came from him to the Escorial Library in 1576. Charles Graux has written the history of this collection.³⁸ Egger thinks our Codex Escurialensis was bought by Mendoza in Italy sometime between 1527–1551, i.e., during Mendoza's sojourn, and came to the Escorial Library with the Greek manuscripts on the 15th of June, 1576. It is unfortunately quite impossible to prove that Mendoza bought the Codex in Venice since his manuscript purchases ranged over Italy and the East. So nothing in the Codex itself can help us to ascertain its whereabouts during the lifetime of Dürer.

However there is one small piece of evidence which may cast some light on the whereabouts of the Codex Escurialensis after it left the shop of Ghirlandaio and before it departed for Spain as the property of Mendoza. In the Codex on folio 34 is a representation of a fragment of a Nereid sarcophagus (Fig. 9). A young Triton with his back turned toward us and with drapery over his left arm embraces a Nereid who places her right hand on his left shoulder. Her legs are folded at the knee and her drapery is seized by a winged Eros who climbs over the elongated fish tail of the Triton. Michaelis could not locate the original of this drawing³⁹—the subscription in the Escurialensis says it was "inchauagli," i.e., on the Quirinal—but recently Rumpf⁴⁰ has identified the fragment as still existing in Grottaferrata (Fig. 10). This is a fairly insignificant antique fragment yet there exist two further drawings of it, both of which can be dated still in the quattrocento. One is in the Brera at Milan on the present first folio of a fragmentary sketch book of Roman antiques (Fig. 12). This folio has the obviously false ascription of the book to Leonardo da Vinci—the drawings, however, clearly belong to the last third of the fifteenth century.⁴¹ The Brera sketch book has two other motifs which are also in the Escurialensis: Marcus Aurelius on his horse and the side of a sarcophagus representing the Fall of Phaeton. But I feel that it is too great a temerity to assume any connection between the Milan sketch book and the Escurialensis, particularly since the pose of the Eros with his right leg bent back in the Brera version of the Triton relief is seemingly closer to the original than the drawing of the same relief in the Escurialensis where the leg of Eros comes over the fish tail. The Brera drawing is therefore independent of the Escurialensis.

The case is different with the third of the copies of this little antique fragment. This

38. Charles Graux, "Essai sur les origines du fonds Grec de l'Escurial," *Bibliothèque de l'école des hautes études*, XLVI, 1880, pp. 201 ff. and 228 ff.

39. Egger, *op. cit.*, p. 99 (Michaelis).

40. Andreas Rumpf, *Die Meerwesen auf den antiken Sarkophagreliefs*, Berlin, 1939 (Vol. v, *Die antiken Sarkophag-*

reliefs), p. 66, No. 151 and Pl. 56.

41. C. Vicenzi, "Di tre fogli di disegni quattrocenteschi dall'antico," *Rassegna d'Arte*, x, 1910, p. 6. Also Christian Huelsen, "Escurialensis und Sangallo," *Jahreshefte des Österreichischen Archäologischen Institutes*, XIII, 1910, pp. 210–230.

is a drawing preserved in the Library of Christ Church, Oxford,⁴² and exhibited at Burlington House in the London show of Italian Drawings in 1930 (Fig. 11). I wish I could agree with Morelli who ascribed this drawing to Jacopo de'Barbari.⁴³ The style of the work, however, would place it in the circle of Mantegna and in the last years of the fifteenth century. As against the Brera drawing, this time the dependence is perhaps upon the Codex Escurialensis and not on the relief itself, which the North Italian artist is unlikely ever to have seen. In all the drawings the Nereid is turned up toward the spectator in order to show her left leg with its drapery above the other, while in the relief this leg is barely visible and seems not to be draped. The drapery over the shoulder of the Nereid is more blown out. In the relief the drapery does not count for so much. On the other hand, in spite of similarities in the three drawings, it seems even more difficult for stylistic reasons to make the Oxford drawing derivative from the Brera sketch. The Mantegnesque artist could know the motif of the Roman relief most probably only by means of a drawing, so, unless we wish to multiply the number of copies of this insignificant antique by assuming a hypothetical lost one, the drawing in the Escurialensis would supply the better link.

On this rather slender evidence we can surmise that the Codex Escurialensis during the last years of the quattrocento was in North Italy and that some artists in this region made tracings and adaptations from it. Two of these tracings, very exact indeed, of the Apollo and the Hercules must have been in the possession of Dürer at the time when he first became interested in his studies of human proportions.

IV—DÜRER'S PROPORTION DRAWINGS

Dürer tells us himself that it was Jacopo de'Barbari who first fired him with an interest in the study of human proportions.⁴⁴ Jacopo showed him the figures of a man and a woman which he had drawn, not after nature, but according to a system of proportion. The Italian was unable or—according to Dürer—unwilling to explain how the drawings were done. So Dürer set to work on his own ideas and consulted Vitruvius. Thus it was from these two men that he took his start. It is agreed by all critics that the earliest male proportion drawings of Dürer are the Apollo series which, as we have seen, are most likely based on the Apollo Belvedere. These also show the remains of the geometrical constructions whereby Dürer arrived at the contours of the forms. This curious system of construction has been worked out by Ludwig Justi on the basis of these drawings.⁴⁵ More recently Panofsky, in his well known book *Dürers Kunstdtheorie*, has shown how, in a somewhat similar fashion, the artists of the Gothic period, in the manuscript of Villard de Honnecourt for example, "constructed" human forms from geometric figures.⁴⁶ With Dürer, by means of the ruler and compass, squares and circles were superimposed upon a human figure and the contours were related to these geometrical shapes which at the same time conformed to a system of proportional division of the whole figure. Thus at the beginning of his study of proportion Dürer seems to have combined the Gothic geometrical methods of constructing contours of the body with the classical and Italian proportional division of the parts thereof. Later Dürer gives up the whole geometrical determination of contours by means of lines and

42. *Italian Drawings Exhibited at the Royal Academy, Burlington House, London, 1930*, London, 1931, No. 166, pp. 46-47. Pl. CXLIX A.

43. Morelli, *Italian Painters*, II, 1893, p. 198, note; (*Die Galerien zu München und Dresden*, 1891, pp. 259, 263). Also skeptical is A. de Hévesy, *Jacopo de Barbari*, Paris, 1925, p. 42.

44. Wm. M. Conway, *The Literary Remains of Albrecht Dürer*, Cambridge, 1889, pp. 165 and 253.

45. Ludwig Justi, *op. cit.*, Pls. II, III, IV.

46. E. Panofsky, *Dürers Kunstdtheorie*, Berlin, 1915, pp. 91 ff. Cf. J. Kurthen, "Zum Problem der Dürerschen Pferdekonstruktion," *Repertorium für Kunsthistorik*, XLIV, 1924, p. 97, note 45.

circles and turns to sets of arithmetical proportions to determine the relations of the parts of the human body.⁴⁷

Let us now study the Lemberg proportion drawing from the point of view of its construction (Figs. 4 and 8). We will see that the system is exactly the same as for the London Apollo drawing. On the Lemberg drawing the lines of the construction have been indicated by Dürer as well as the proportions in terms of fractions of the whole height. Thus the head is indicated as one-seventh of the height by a curved line and the numeral 7. The face is indicated as one-ninth of the height in a similar way. From the sternum to the arm pit is $1/9$, the waist is $1/6$ as is also the distance from the pit of the throat to the waist, etc. The places for the compass centers to strike the contours are indicated by curved and straight lines. In fact there is no proportion drawing by Dürer in which he gives as many explanations of the geometrical construction as in this one. On the basis of Dürer's instructions one can construct⁴⁸ the circles and squares which give the contours (Fig. 8). The square in the chest is $1/6$ of the height of the figure as is twice shown by lines with numerals. It is a chord of the circle which gives the curve of the shoulders and the contour of the chest under the arm pits, and has a radius of $1/9$, as Dürer indicates. A circle of the same radius is indicated by Dürer for the contour of the hips with its center below the navel where Dürer's two curved lines, each marked 9, come together. The contours of the rolls of muscle in between are gotten by two smaller circles, each with a radius of $1/10$ of the height of the figure. One has its center in the navel, the other at a point, well marked by Dürer, which is the procardium. The centers of all the circles used for contours lie on the incised vertical axis of the figure. It was in order to make these contours of the muscular body conform exactly to these circles as they do that Dürer has indulged in so many corrections of lines around the hips. The number of circles he has used in this drawing is more than in the slimmer Apollo drawings. The only indications lacking in the Lemberg drawing which are present in the Apollo series are the arcs of the circles which determine the distance of the knees from the hips, although by actual measurement one can show that the knees in the Lemberg construction were so determined.

Thus we see that exactly the same system of construction is present both in the Lemberg drawing which is based on Hercules and in the London Apollo drawing which is based on Apollo Belvedere. The only fundamental difference is in the system of proportions. The slimmer Apollo is eight heads or ten faces high. The heavier Hercules is seven heads or nine faces in height. These are the systems of proportions which apply as well to the actual existing statues and to the drawings of them in the Codex Escurialensis. There cannot be much difference in date between the Apollo series of drawings and the Lemberg Hercules, since both are based on tracings of antique statues probably from the same source. Because of the great explicitness of construction and the meticulous exactitude of the contours and circles, it can be held that the Lemberg drawing is the earliest of all the male proportion drawings of Dürer. So Tietze has dated it correctly in the year 1500,⁴⁹ as against the date 1506 proposed by Flechsig and adopted by Winkler.⁵⁰

It would seem then on the evidence of the drawings that remain to us that Dürer started his proportion studies of the male form with the drawings based on two of the most famous statues from antiquity, the Apollo Belvedere and the weary Hercules of Lysippos. His

47. E. Panofsky, *The Codex Huygens*, London, 1940, pp. 113 ff.

48. The reconstruction in Fig. 8 was most kindly drawn for this article by my colleague Prof. E. Baldwin Smith.

49. Tietze, *op. cit.*, Nos. 169-170, pp. 52 and 404.

50. Flechsig, *op. cit.*, II, p. 200. Winkler, *Zeichnungen*, II, p. 101. For a criticism of Flechsig's method of dating proportion drawings, see Alice Wolf, "The Apollo Drawing L 741 and its relationship with Dürer," *Art in America*, XXIX, 1941, p. 30, note 18.

knowledge of these statues is most likely based on tracings from the drawings of them in the Codex Escurialensis, tracings which he had gotten in North Italy or perhaps from Jacopo de'Barbari in Nürnberg in 1500. It is, however, impossible to prove that Jacopo knew the Escurialensis. The interest of Dürer in these drawings of classical statues was of course aesthetic and not archaeological so he does not hesitate to adapt them. But I would think that in 1500 Dürer would know a Hercules or an Apollo when he saw one.

Since now it is sure that from the very beginning of his proportion studies Dürer had both a slim and a heavy-set system of proportions, we can understand why he never finally settled upon one set of proportions as the norm, as did Alberti and other Italians with the exception of Leonardo. In his famous *Vier Bücher von menschlicher Proportion* at the end of his life, he still retains as one of his types the "dicken bewrischen man" seven of his own heads tall, who is none other than a descendant of the Hercules, alongside the slimmer type of eight heads tall which descends from the Apollo. Of the more graceful type he gives two variations perhaps indicating a certain preference. But Dürer was not so much interested, by this time, in an aesthetic canon of proportion. He was well on his way to found the science of the morphology of the human body.⁵¹ In the first book of his proportion treatise he has five different types of proportions for men and women. In his other books he increases the number.

G. P. Lomazzo in his *Trattato dell'arte* which he published in 1584, has based his treatment of human proportion on the first book of Dürer's famous Treatise, although he does not say so. He takes over completely the various types of proportions. For the heavy type, whose proportion is seven heads tall, Lomazzo comments:⁵² "La propotione di sette teste è accomodata per fare gl'huomini robusti, & di spalle ample & membra rilevate, come soldati & altri huomini forti & robusti. . . Di che si vede miracoloso esempio in Roma, in campo di fiore nel palazzo di Farnesi, in quello Hercole fatto per mano dell'eccellente scoltore greco, chiamato Glaucone." Thus does Lomazzo quite unconsciously return the heavy-set proportion type of Dürer to its source—the weary Hercules of Lysippos.

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51. D'Arcy Wentworth Thompson, *On Growth and Form*, Cambridge, 1942, pp. 1053 and 1055.

52. *Trattato dell'arte della pittura, scoltura et architettura* di Gio. Paolo Lomazzo, Milanese pittore, Milano, 1584, p. 287; Panofsky, *Codex Huygens*, p. 105, note 1.

Note. I cannot close without a word of thanks to E. Panofsky whose encouragement was very gratifying when I ventured so far from my field into the province of the Dürerists. I hope he will still feel encouraging.

THE TEXTUAL BASIS OF THE UTRECHT PSALTER ILLUSTRATIONS

BY DORA PANOFSKY

THANKS to Adolph Goldschmidt and Paul Durrieu we know that the Utrecht Psalter was written and illustrated between 816 and 835, probably in the monastery of Hautvillers near Reims.¹ Moreover it is generally accepted that its illustrations reflect, directly or indirectly, an archetype of the early fifth century. Much has been done to throw light on the style and provenance of this archetype, but comparatively little attention has been paid to the nature of the text or texts on which its illustrations may have been based.²

Before St. Jerome there was no standard Latin version of the Psalter. There existed only a number of slightly divergent translations, based on the Septuagint, which are loosely referred to as "the *Itala*" or, more appropriately, the unrevised Old Latin versions. In 383 or 384 St. Jerome, in an attempt at unifying and correcting these earliest translations, produced a revised version which, owing to its acceptance by the Roman and most other Italian churches, is known as the *Psalterium Romanum* and is still in use in St. Peter's and Milan. Six years later, 389 or 390, he critically edited this text on the basis of Origen's lost *Hexapla*, and this emended redaction—soon adopted by the Gallican Church and therefore known as the *Psalterium Gallicanum*—was ultimately to be incorporated in the authorized Latin Version of the Bible, the Vulgate.³ But as early as the following year (390 or 391) the indefatigable Father yielded to the entreaties of his friend Sophronios who had requested a translation more "authentic" than those thus far available. A Greek accustomed to quote the Psalter from the Septuagint, he had been impressed by the objections of a Jew who had challenged the correctness of this version—a challenge which, *a fortiori*, affected also all the Latin translations. He had therefore asked St. Jerome to supply him with an unimpeachable translation, made directly from the Hebrew original, which he, Sophronios, might in turn translate into Greek; the result was St. Jerome's third and last redaction of the Latin Psalter text, the *Liber Psalmorum iuxta Hebraicam Veritatem* or *Psalterium iuxta Hebraeos*, quoted, for short, as the *Hebraicum*. It is, to be sure, not so exclusively derived from the Hebrew original as St. Jerome asks his readers to believe; yet it differs from all the previous Latin translations much more widely than these among each other, and it is perhaps for this reason that it was never accepted for liturgical use. It enjoyed, however, considerable popularity and has come down to us in numerous manuscripts whereas Sophronios' new Greek translation seems to be lost.⁴

The text of the Utrecht Psalter follows the Gallican version;⁵ but it is evident that the

NOTE: The writer wishes to thank Professors Wilhelm Koehler and E. A. Lowe for several helpful suggestions.

1. For the Utrecht Psalter see the excellent edition by E. T. DeWald, *The Illustrations of the Utrecht Psalter*, Princeton (1932), with bibliography on p. 73, to which may be added: *The Canterbury Psalter*, with Introduction by M. R. James, London, 1935, and C. R. Morey, *Early Christian Art*, Princeton, 1942, p. 132.

2. See, however, below, notes 7, 14, 20, and 21.

3. See *The New Schaff-Herzog Encyclopedia of Religious*

Knowledge, xi, pp. 115 ff., particularly pp. 123 ff. For the unrevised Old Latin versions see A. Dold and A. Allgeier, *Der Palimpsestpsalter im Codex Sangallensis 912*, Beuron, 1933, with bibliographies on pp. xiv and xviii.

4. Migne, *Patrologia Latina*, 28, cols. 1183 ff. Cf. A. Allgeier, "Die mittelalterliche Ueberlieferung des Psalterium iuxta Hebraeos von Hieronymus . . .," *Oriens Christianus*, 3 ser., III/IV, 1928/29, pp. 200 ff. See also *Dictionary of Christian Biography*, iv, p. 718.

5. This is, however, not true of the derivatives of the

illustrations cannot be accounted for by this text alone. In a number of cases they presuppose the patristic commentaries,⁶ and this not only in such specifically Christian representations as the numerous scenes from the Life and Passion of Christ or the Martyrdoms of Sts. Peter, Paul, and Lawrence, but also in other insertions and amplifications.⁷ But even where the illustrations are limited to the substance of the Psalter text proper they do not always agree with the Gallican version.

Now, there existed what may be called comparative or parallel editions of the Latin Psalter texts. More than two centuries before the Utrecht Psalter was written and illuminated Isidore of Seville produced a two-column edition in which a version from the Septuagint—we do not know exactly which—was juxtaposed with the *Hebraicum*, both texts “facing each other line for line” so as to facilitate comparison and marked with Origen’s diacritical signs: a “virgula” denoting passages present in the earlier text but absent from the *Hebraicum*; an asterisk marking passages of which the opposite was true; and an “antigraphus” calling attention to such phrases as “exhibited a discrepancy in meaning.”⁸

A parallel edition of the *Hebraicum* and the Gallican version—written, however, on two pages instead of in two columns, preceded by St. Jerome’s Preface instead of by Isidore’s, and without diacritical signs, all of which shows its independence of Isidore’s enterprise—dates from the second half of the eighth century and is still preserved in the Vatican Library

Utrecht Psalter. The Psalter London, Brit. Mus., Harley 603 has the *Psalterium Romanum* text up to Ps. 100 and the Gallican version thereafter; the Eadwine or Canterbury Psalter (cf. note 1) and the Psalter Paris Bibl. Nat. Lat. 8846 juxtapose the *Psalterium Romanum*, the Gallican version and the *Hebraicum* in three columns, with the Gallican version characterized as the “main text” (see note 27).

6. For the early commentaries on the Psalter see especially E. T. DeWald, *The Stuttgart Psalter*, Princeton, 1930, particularly pp. 13 ff.

7. A concrete instance, referring to the curious merry-go-round in the illustration of Ps. xi (12) on fol. 6 v., is adduced in G. R. Benson and D. T. Tsilos, “New Light on the Origin of the Utrecht Psalter,” *ART BULLETIN*, XIII, 1931, p. 50, note 80. Another case in point is the scene in the lower right-hand corner of fol. 14 r., Ps. xxiv (25). A majestic woman, holding a roll in her left hand, leads three children to an urn containing more rolls (or books) while a man, placed on the other side of the urn, offers with either hand a roll to two men followed by a group of blind and lame (Fig. 18). This scene has been interpreted as the God-fearing Man of v. 12, distributing alms from the urn to the poor, to the crippled, and to the fatherless and widows. But neither the woman nor the act of alms-giving can be accounted for by the text, apart from the fact that the urn is too solemn a receptacle for the purpose and evidently contains rolls or books. From the commentaries, however, it appears, first, that the woman is the Church (St. Augustine, *Patrologia Latina*, 36, col. 184: “Christus, sed in Ecclesiae persona, loquitur”); second, that the children are the “innocentes” (gloss in the Canterbury Psalter, fol. 42 v.); third, that the recipients of the gifts are the “re-quirentes testamentum ejus et testimonia ejus” of v. 10, and that these gifts symbolize the Old and the New Testament (hence the two rolls offered by what seems to be a priest), particularly the Prophets and the Gospels (St. Augustine, *loc. cit.*; cf. Cassiodorus, *Patrologia Latina*, 70, col. 179).

8. *Patrologia Latina*, 81, col. 971: “Origenes quondam ille, qui apud Graecos in opere divinarum non parvo elaboravit studio, ut ostenderet nostris qualis per singulas editiones Scripturarum lectio teneretur, in propriis paginis

vel columnis editiones singularum translationum descripsit, ut ea quae in unaquaque dearent, vel superflua habebantur, caeteris quibusque signis distinguerentur. Hujusmodi igitur ego ipse studio delectatus, Psalmorum librum duarum translationum compingere malui, sive ut Septuaginta Interpretes, vel caeteri, transtulerunt; sive ut in Hebreo legitur, et sanctissimo Hieronymo in Latinum sermonem interpretatum agnosciuntur. Utramque igitur editionem *e regione* componentes adjunximus, ut quaeque in singulis vel desunt vel potius abundant, signis ad capita versiculorum praefixis, manifestentur. Quapropter ubi in Septuaginta translatione aliquid superfluum est, virgulae + signo notatum est; ubi vero aliquid deest, ut clareat, asterisci ✕ figura signatum est. Verum ubi per dissonantiam utraque invicem discrepant, antigraphus √ in utrisque columnis appositus est. Nam procul dubio in plerisque locis multo aliud sensum suggestum: in plerisque vero ita pari sensu incedunt, ut aequi sibi pro expositione adhibeantur. Plurimum enim valet lectori geminae hujus interpretationis collatio: nam obscurae sententiae ambiguitas, quae per unius intellectum difficilis est, alterius inspectione aperitur . . . ” (italics mine).

This Preface (Isidore’s edition itself seems to be lost) was overlooked by D. A. Wilmart, “Le Psautier de la Reine N. XI,” *Revue Bénédictine*, XXVIII, 1911, pp. 341 ff., who seems to think that the whole idea of double and triple Psalters originated in France. It shows that double Psalters existed in Spain as well as in France, and if I am correct both families had their ancestors in Italy. Isidore’s Preface is, however, referred to in E. T. DeWald, *Stuttgart Psalter*, p. 6, who pointed out that it recurs—though in terribly garbled form—at the beginning of this manuscript. In it (fol. 1 r.) it is illustrated by two figures, both inscribed “Origenes,” one of which represents a scholar with arms symmetrically outstretched in a kind of *Orans* gesture, while the other represents a juggler balancing, likewise symmetrically, a pair of baskets. Could it be that the latter figure illustrates, in a humorous way, the very process described in the Preface, the process of balancing one version against the other and thereby mastering their “ambiguity”? Cf. also notes 13, 14, and 30.

(Cod. Reg. 11).⁹ And a manuscript of similar construction, likewise written in France but more sumptuous and of slightly later date, was ordered by Theodulf of Orléans (about 750-821) for his daughter Gisla—born, it is hoped, “ante susceptum episcopatum”; it is graphically described in the following distichs:

“Gisla, favente deo venerabile suscipe donum,
Quod tibi Theudulfus dat pater ecce tuus.
Nam tibi psalterium praecepi scribier istud,
Argento atque auro quod radiare vides.
Quo prior Hebraeo concordat pagina vero,
Editio ut prisca est mox habet inde sequens.
Quas bene Hieronymus hanc transfert, corrigit illam,
Sensibus egregiis utraque, crede, micat.”¹⁰

In addition to these “double Psalters” (*psalteria duplia*) we find the “triple Psalter” (*psalterium triplicis*) in which the *Hebraicum* is juxtaposed both with the Gallican and the Roman versions. The best-known specimens of this type, which naturally implied an arrangement of the text in three columns, are two derivatives of the Utrecht Psalter itself, the Eadwine or Canterbury Psalter of the early twelfth century, whose pictures are directly copied from the Utrecht Psalter, and a late twelfth-century Psalter in Paris (Bibl. Nat., Lat. 8846) which is, in turn, a copy of the Canterbury Psalter. But contrary to previous assumptions, *psalteria triplicia* like these are by no means “des compositions factices et récentes” which would have been unknown during the first millennium.¹¹ One of the surviving instances, the Cod. Fol.v.I. No. 5 in Leningrad, is even older than both the Reginensis 11 and the Theodulf Psalter; it was written in France in the first half of the eighth century.¹²

That such double or triple Psalters already existed in the early fifth century cannot be proved, but there is little reason to doubt it. Isidore does not claim that his parallel edition was the first ever made—he merely states that he “amused himself” with applying Origen’s editorial technique to the Psalter—and all the evidence, partly adduced above, points to the existence of a non-Spanish tradition. In fact a juxtaposition of one or two of the earlier Latin versions with the *Hebraicum* must have been of particular interest at a time when the Gallican version was not yet widely accepted, and when the *Hebraicum* was something of a sensation, supplying as it did a text “very much different” from all previous translations and commanding attention, not only by its higher claim to “truth” but also by its very novelty. Conversely, we can easily see that a manuscript of the ninth century, intended for liturgical use in a monastery near Reims, would limit itself, as far as the text is concerned, to the then recognized Gallican version.¹³

9. See E. A. Lowe, *Codices Latini Antiquiores*, I, 1934, p. 30, no. 101 and D. A. Wilmart, *loc. cit.* Wilmart, p. 356, enumerates three later double Psalters of this type (all written in France) and also gives, on p. 351, a useful list of triple Psalters as exemplified by the Canterbury Psalter and the Psalter Paris Bibl. Nat. Lat. 8846 (see, however, note 11).

10. *Monumenta Germaniae, Poetae Latini Aevi Carolini*, I, 1881, p. 541 (referred to by Wilmart, *loc. cit.*, p. 356). In Cod. Reg. 11 the Gallican version is characterized as the “main text,” first, by the script (square capitals as opposed to uncials); second, by the fact that it occupies the “dexter” page when the manuscript is opened, as is also the case with the three other double Psalters adduced by Wilmart. In Theodulf’s Psalter a similar distinction seems to have been made by the use of gold and silver script, but in this case

the *Hebraicum*, written on the “prior pagina,” seems to have taken precedence over the Gallican version. This exceptional arrangement may be accounted for by Theodulf’s genuinely historical attitude which also manifests itself in his quite correct statement that St. Jerome acted as a real “translator” only in the case of the *Hebraicum* while he merely “corrected” the Old Latin versions.

11. Thus Wilmart, *loc. cit.*, p. 350. Wilmart was not yet acquainted with the Leningrad manuscript.

12. Dom A. Staerk, *Les manuscrits latins du V^e au XIII^e siècle conservés à la Bibliothèque Impériale de St. Pétersbourg*, St. Petersburg, I, 1910, pl. xxxviii.

13. A parallel instance is furnished by the Stuttgart Psalter. Supposedly written in the tenth century, it follows, like the Utrecht Psalter, the Gallican version. But the presence of Isidore’s Preface (see note 8) would seem to

Thus we may ask whether the Early Christian archetype of the Utrecht Psalter illustrations may not be based on *both* the Gallican version—or, which makes no difference from the point of view of this study, any other “editio prisca”—and the *Hebraicum*. If the illuminator had to illustrate one of those comparative or parallel editions, he might have used the *Hebraicum* as an alternative wherever it exhibited an “*alius sensus*” and wherever this “*alius sensus*” recommended itself to the perception of an artist.

Such a conjecture would largely eliminate the above mentioned difficulties; for, it is by the *Hebraicum* that we can account for nearly all those iconographical features which cannot be derived from either the Gallican version or the patristic commentaries, and the original illustrator can be shown to have been guided by a simple and consistent principle of selection. Wherever the *Hebraicum* disagrees with the Gallican version (to which we shall henceforth confine ourselves because it differs from the earlier translations linguistically but hardly ever materially), he preferred that version which suggests a concrete visual image to that which expresses itself in an abstract or unintelligible way; where, exceptionally, either text suggests an equally acceptable image he even combined them. He preferred the more graphic or the more “reasonable” image to the less striking or less natural one; and he preferred a clearcut contrast to mere variation or insipid repetition.

In Psalm x (11), v. 4 (3), for instance, the *Hebraicum* has the phrase “... quia leges dissipatae sunt; justus quid operatus est?” which does not conjure up any concrete visual picture; understandably then in this case the illustrator kept to the Gallican text in which the phrase “quae perfecisti, destruxerunt” at once suggests the image of wicked people destroying a building (Fig. 8). Conversely, where the Gallican text of Psalm cxi (141), v. 7, has the almost unintelligible phrase “crassitudo terrae erupta est super terram,” whereas the *Hebraicum* says “sicut agricola cum scindit terram,” the illustrator gratefully accepted the idea of a peasant plowing the soil (Fig. 17).

When illustrating Psalm cxxxvi (137), v. 2, the artist had a choice between adorning his willow trees with harps (*citharae*) or pipe-organs (*organa*); and he very reasonably decided for the former alternative as suggested by the *Hebraicum* (“super salices in medio ejus suspendimus *citharas nostras*”).¹⁴ Where, in Psalm cxxix (130), v. 6, the *Hebraicum* would have required the repetitious representation of two suns (“a vigilia matutina usque ad vigiliam matutinam”) he preferred the Gallican text (“a custodia matutina usque ad noctem”) which entitled him to contrast the sun with the moon. But when, in the illustration of Psalm lxxiii (74), v. 17, he could glorify God either as the creator of summer and spring (“aestatem et ver, tu plasmasti ea”) or as the creator of summer and winter (“aestatem et hiemem tu plasmasti”) he preferred the sharper contrast suggested by the *Hebraicum* and more concordant with the preceding antithesis between “day” and “night” (Figs. 11

show that it, too, is ultimately based on an archetype—presumably of the early seventh century—which juxtaposed one of the earlier versions with the *Hebraicum*.

14. That the illustration in this case “more closely translates the Hebrew (and English) version than that of the Vulgate” was already observed by Walter DeG. Birch, *The History, Art and Palaeography of the Manuscript styled the Utrecht Psalter*, London, 1876, p. 273. So far as I know Birch is the only scholar who envisaged the possibility that the illustrations of the Utrecht Psalter may be influenced by the Hebrew tradition. He does not think, however, of St. Jerome’s *Hebraicum*, let alone of double or triple Psalters combining the *Hebraicum* with the earlier texts, but alternately refers to the Hebrew original and to an unspecified “Hebraic version”; he thus explains the situa-

tion by the improbable hypothesis that “the whole series of pictures, in its first state, was produced to accompany the Hebrew text” or, as he expresses it in another place (pp. 246 ff.), that “these drawings which we have before us in the Utrecht (Gallican and Septuagintal) Psalter had been copied into it from an illustrated exemplar of a Hebraic version.” It should be noted that the harps are also found in the Stuttgart Psalter, fol. 152 r. (for the classical representational tradition of the motif see C. Boetticher, *Der Baumkultus der Hellenen*, Berlin, 1856, pp. 56 ff.), and that, on the other hand, in the Utrecht Psalter an actual pipe-organ is depicted where both the *Hebraicum* and the Gallican version have the word *organum*. See fol. 83 r., Ps. cl (150); the same is true of the illustration of the Apocryphal Psalm on fol. 91 v.

and 12): not only did he drape the figure in the heavy cloak characteristic of all the classical representations of winter,¹⁵ he also elaborated this cloak into a kind of shaggy fur coat apparently suggested, in the last analysis, by Ovid's "glacialis Hiems canos hirsuta capillos" (*Metam.*, II, 30).

In order to simplify matters the cases in point will be presented in a chart. In it are listed: first, the motifs revealing the preferences of the artist; second, the pertinent passage according to the Gallican version; third, the parallel passage according to the *Hebraicum* (here quoted from the text printed in the *Patrologia Latina*, with the not very essential variants in the Canterbury Psalter added in brackets). The Gallican version has been checked against the Septuagint, the *Psalterium Romanum*, and, as far as possible, the unrevised Old Latin versions; but in no case does any of the earlier Latin translations differ from the Gallican text so as possibly to account for motifs here derived from the *Hebraicum*. The chart, it is hoped, will speak for itself.

INSTANCE	MOTIF	GALLICAN VERSION	HEBRAICUM
Ps. I (1), fol. 1 v. Based on both Gall. and Hebr.	Demon of Pestilence, combined with a group of the "scornful" surrounding the "seat." Fig. 1.	v. 1: . . . et in cathedra pestilentiae non sedit.	v. 1: et in cathedra derisorum non sedit.
Ps. IX (9 and 10), fol. 5 r. Based on Gall. ¹⁶	Poor man captured by the rich by means of a rope or noose. Fig. 7.	v. 30: . . . dum attrahit eum. In laqueo suo humiliabit eum . . .	10, v. 9: rapiet[rapiat] pauperem cum attraxerit eum ad rete suum.
Ps. X (11), fol. 6 r. Based on Gall.	Building destroyed by the wicked. Fig. 8.	v. 4: Quoniam, quae perfecisti, destruxerunt: justus autem quid fecit?	v. 3: Quia leges dissipatae sunt, justus quid operatus est?
Ps. XIII (14), fol. 7 v. Based on Gall.	Ruler under a domed canopy around the columns of which are serpents twining, an open grave beneath it. The wicked committing deeds of violence.	v. 3: Sepulcrum patens est guttur eorum . . . venenum aspidum sub labiis eorum . . . veloces pedes eorum ad effundendum sanguinem. Contritio et infelicitas in viis eorum, et viam pacis non cognoverunt.	Vacat in Hebr.
Ps. XV (16), fol. 8 r. Based on Gall.	Three patients in bed.	v. 4: Multiplicatae sunt infirmitates eorum.	v. 4: Multiplicabuntur idola eorum . . .
Ps. XXV (26), fol. 14 v. Based on Gall. ¹⁷	Children washing their hands in a basin. Fig. 5.	v. 6: Lavabo inter innocentes manus meas . . .	v. 6: Lavabo in innocentia manus [palmas] meas . . .

15. For the representation of Winter as a wrapped figure see, e.g., J. C. Webster, *The Labors of the Months*, Princeton, 1938, pp. 33 f. and recently D. Levi, "The Allegories of the Months in Classical Art," *ART BULLETIN*, XXIII, 1941, pp. 251 ff., especially pp. 256 f.

16. This shows that the illustrator, when following the Gallican version (*laqueus*), depicts an actual snare or noose whereas he represents a net when following the *Hebraicum*

(*rete*): see fol. 17 r., Ps. XXX (31); fol. 19 v., Ps. XXXIV (35); fol. 78 v., Ps. CXXXIX (140) (Fig. 16). The enormous net in the center of fol. 79 r., Ps. CXL (141), does not illustrate v. 9 ("Custodi me a laqueo" or "de manibus laquei"), but v. 10 which reads, in the Gallican version: "Cadent in reticulo ejus peccatores," and in the *Hebraicum*: "Incident in rete ejus impii." Cf. also note 23.

17. Cf. fol. 41 v., Ps. LXXII (73), v. 13.



FIG. 1. Fol. 1 v. Cathedra Pestilentiae;
Cathedra Dolorisorum

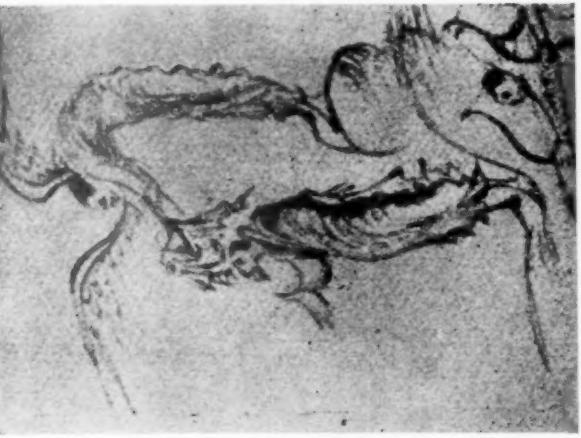


FIG. 2. Fol. 35 v. Absconde Me

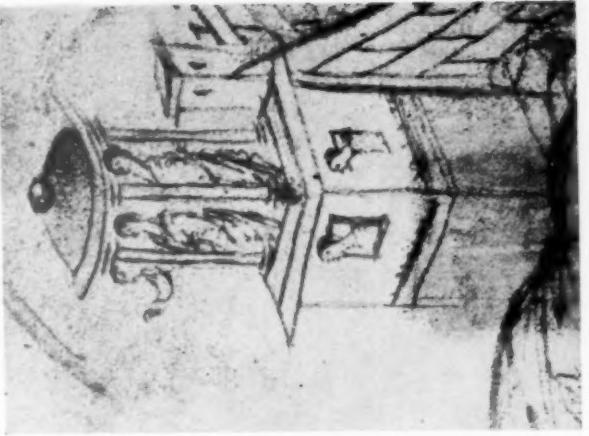


FIG. 3. Fol. 27 v. Narrate in Turribus
Ejus

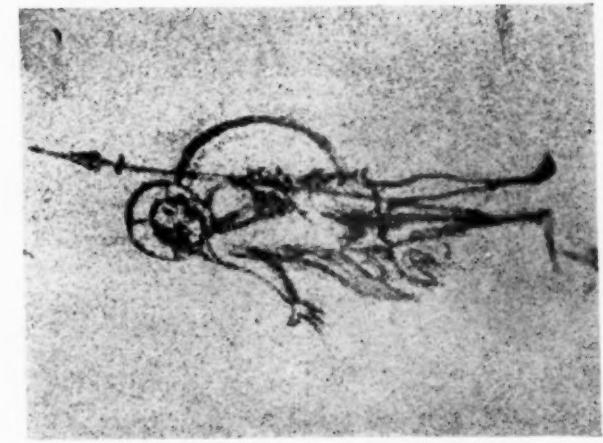


FIG. 4. Fol. 34 v. Attamen Ipse Est Secum Meum



FIG. 5. Fol. 14 v. Lavabo inter Innocentes Manus Meas

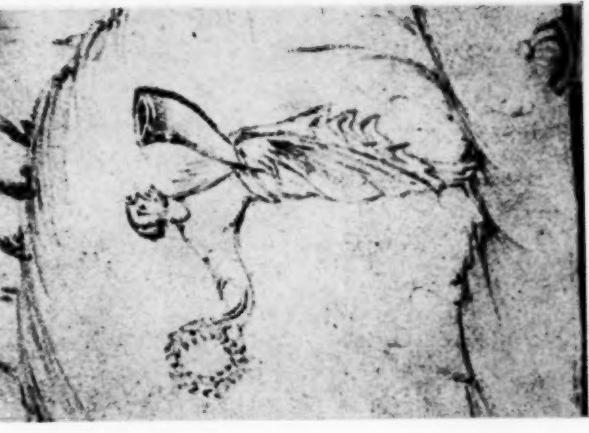


FIG. 6. Fol. 75 r. Diadema Eius

FIGS. 1-6. DETAILS FROM Utrecht PSALTER



FIG. 7. Fol. 5 r. In Laqueo Suo Humiliabit Eum



FIG. 8. Fol. 6 r. Quae Perfecisti, Destruxerunt



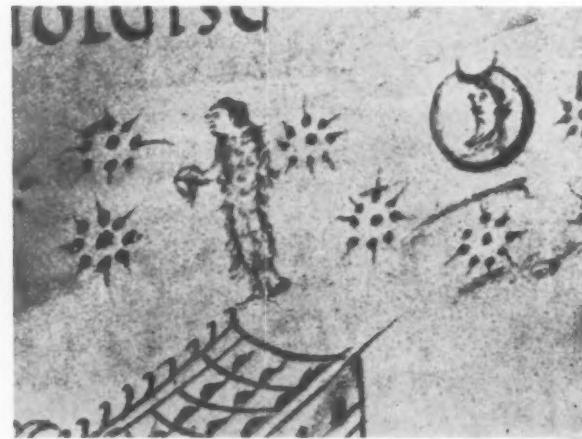
FIG. 9. Fol. 15 v. Protector Meus



FIG. 10. Fol. 16 v. Stauisti Monti Meo Fortitudinem



FIGS. 11 and 12. Fol. 42 r. Aestatem et Hiemem Tu Plasmasti



FIGS. 7-12. DETAILS FROM Utrecht PSALTER

INSTANCE	MOTIF	GALLICAN VERSION	HEBRAICUM
Ps. xxvii (28), fol. 15 v. Based on Gall. ¹⁸	Angel holding an umbrella over the royal Psalmist. Fig. 9.	v. 7: Dominus adjutor meus, et <i>protector</i> meus.	v. 7: Dominus fortitudo mea et <i>scutum</i> meum . . .
Ps. xxix (30), fol. 16 v. Based on <i>Hebr.</i> ¹⁹	Psalmist on mountain. Fig. 10.	v. 8: Domine, in voluntate tua praestitisti <i>decori</i> <i>meo</i> virtutem.	v. 7: Domine, in voluntate tua statuisti <i>monti</i> <i>meo</i> fortitudinem . . .
Ps. xxx (31), fol. 17 r. Based on <i>Hebr.</i>	Psalmist freed from net instead of snare or noose.	v. 5: Educes me de <i>laqueo</i> hoc, quem absconderunt mihi.	v. 4: Educes me de <i>reti</i> , quod absonderunt mihi . . .
Ps. xxxiii (34), fol. 19 r. Based on Gall.	Rays emanating from the mandorla and illuminating the righteous.	v. 6: Accedite ad eum, et <i>illuminamini</i> .	v. 5: Respicite ad eum, et <i>confuite</i> . . .
Ps. xxxiv (35), fol. 19 v. Based on <i>Hebr.</i>	Net and pit (note the verb <i>foderunt</i> in <i>Hebr.</i>) instead of snare or noose.	v. 7: Quoniam gratis absconderunt mihi <i>interitum laquei</i> <i>sui</i> : supervacue <i>exprobraverunt</i> animam meam. v. 8: Veniat illi <i>laqueus</i> , quem ignorat: et <i>cattio</i> , quam abscondit, apprehendat eum: et in <i>laqueum</i> cadat in ipsum.	v. 7: Quia frustra absconderunt mihi <i>insidias retis</i> <i>sui</i> : sine causa <i>foderunt</i> animae meae. v. 8: Veniat ei calamitas quam ignorat, et <i>rete</i> suum quod abscondit comprehendat eum, et cadat in <i>laqueum</i> [calamitatem].
Ps. xlvi (48), fol. 27 v. Based on Gall.	Talking and gesticulating figures on tower. Fig. 3.	v. 13: Circumdate Sion, et complectimini: <i>narrate in turribus eius</i> .	v. 12: Circumdate Sion, et circuite eam, <i>numerare turres ejus</i> . . .
Ps. lvi (55), fol. 31 r. Based on Gall.	Table with food.	v. 15: . . . qui simul mecum dulces capiebas <i>cibos</i> .	v. 14: qui simul habuimus dulce <i>secretum</i> . . .
Ps. lvii (58), fol. 32 v. Based on Gall. ²⁰	Candle.	v. 9: Sicut <i>cera</i> , quae fluit, auferentur.	v. 8: Quasi <i>vermis tabefactus</i> pertranseat [pertranseant] . . .

18. The umbrella is a literal illustration of the word *protector*; see, *per contra*, fol. 35 v., Ps. lxiii (64), where the illustrator, having to choose between "Protexisti me" and "*Absconde* me," decided for the latter alternative (Fig. 2). That the Paris Psalter Bibl. Nat. Lat. 8846, fol. 46 v. shows a shield instead of the umbrella is probably due to a mere misinterpretation of the visual data.

19. As mountainous backgrounds are frequent in the Utrecht Psalter this instance would not carry much conviction were it not for the fact that this particular mountain seems to bear a special emphasis in relation to the small, excited figure of the Psalmist, and that the use of the *Hebraicum* can be demonstrated by so many less questionable instances.

20. Apart from fol. 77 r., Ps. cxxxvi (137), this is the only other picture which Walter DeG. Birch adduces in support of his theory according to which the archetype of the Utrecht Psalter "was produced to accompany the Hebrew

text" (see note 14). But the present instance is ill chosen in that the serpentine creature in the lower left-hand corner is certainly not that "snail that melteth" (*vermis tabefactus*) of *Hebr.*, v. 8, which, in the Gallican version, v. 9, had come to be replaced by the *cera*, *quae fluit*, but the "adder that stoppeth her ear" which occurs in both versions (*aspis surda*, *et obturans aures suas* according to Gall., v. 5, and *regulus surdus obturans aurem suam* according to *Hebr.*, v. 4). Similarly the "tear-bottle" supposedly raised to the eyes of the Psalmist in the picture on fol. 31 v., Ps. lv (56), can unfortunately not be adduced as a *Hebraicum* motif. If it were a "tear-bottle" it could only be accounted for by *Hebr.*, v. 8 ("pone lacrymam meam in *utre tuo*") and not by Gall., v. 9 ("posuisti lacrymas meas in *conspectu tuo*"). But from the copies in the Canterbury and Paris Psalters, and from the analogous motif in the Utrecht Psalter, fol. 40 r., Ps. lxx (71), we must conclude that the "tear-bottle" is in reality a mere drapery fold.

INSTANCE	MOTIF	GALlican VERSION	HEBRAICUM
Ps. LVII (58), fol. 32 v. Based on Gall. ²⁰	Hands washed in blood.	v. 11: ... manus suas lavabit in sanguine peccatoris.	v. 10: ... pedes suos lavabit in sanguine impii.
Ps. LX (61), fol. 34 v. Based on Gall.	Winged angel offering a veil to the Psalmist.	v. 5: ... protegar in velamento alarum tuarum . . .	v. 4: ... sperabo in protectione alarum tuarum.
Ps. LXI (62), fol. 34 v. Based on Hebr.	The Lord with spear and shield. Fig. 4.	v. 3: Nam et ipse Deus meus, et salutaris meus.	v. 2: Attamen ipse est scutum meum et salus mea.
Ps. LXIII (64), fol. 35 v. Based on Hebr.	Angel covering the head of the Psalmist with a cloth. Fig. 2.	v. 3: Protexisti me a conventu malignantium.	v. 2: Absconde me a consilio malignorum . . .
Ps. LXVII (68), fol. 37 v. Based on Gall.	Men lying in graves.	v. 7: . . . qui educit vincitos in fortitudine, similiter eos, qui exasperant, qui habitant in sepulcris.	v. 6: Educet [Educit] vincitos in fortitudine: increduli autem habaverunt in siccitatibus.
Ps. LXII (73), fol. 41 v. Based on Gall.	Children washing their hands at a spring.	v. 13: . . . et lavi inter innocentia manus meas.	v. 13: . . . et lavi in innocentia manus meas.
Ps. LXXXIII (74), fol. 42 r. Based on Hebr.	Personifications of summer and winter instead of summer and spring. Figs. 11 and 12.	v. 17: . . . aestatem et ver, tu plasmasti ea.	v. 17: . . . aestatem et hiemem tu plasmasti.
Ps. LXXXII (83), fol. 48 v. Based on Gall.	Riders blowing horns. Fig. 13.	v. 3: . . . quoniam ecce inimici tui sonuerunt . . .	v. 2: Quia ecce inimici tui tumultuati sunt . . .
Ps. LXXXIII (84), fol. 49 r. Based on Gall.	The righteous ascending steps.	v. 6: Beatus vir, cuius est auxilium abs te; ascensiones in corde suo dispositus.	v. 6: Beatus homo cuius fortitudo est in te: semitae in corde ejus.
Ps. CIX (110), fol. 64 v. Based on Gall.	The righteous, bearing torches, under the morning star.	v. 3: Tecum principium in die virtutis tuae in splendoribus sanctorum: ex utero ante luciferum genui te.	v. 3: Populi tui spontanei erunt in die fortitudinis tuae: in montibus sanctis. Quasi de vulva orietur tibi ros adolescentiae tuae.
Ps. CXIX (120), fol. 71 v. Based on Hebr. ²¹	Tents. Fig. 14.	v. 5: . . . habitavi cum habitantibus Cedar.	v. 5: . . . habitavi cum tabernaculis Cedar.
Ps. CXXVIII (129), fol. 74 r. Based on Gall.	Forge behind the personification of Israel. Fig. 15.	v. 3: Supra dorsum meum fabricaverunt peccatores.	v. 3: Supra cervicem meam arabant arantes.

21. That the tents cannot be accounted for by the Gallican text has been justly observed by E. T. DeWald (p. 53), and he is inclined to explain them by the assumption that "the original illustration was based on a Greek text." In fact the Septuagint has μέρα τῶν σκηνωμάτων κῆδρος, but the phrase in the *Hebraicum*, taken together with the other evi-

dence, offers a no less plausible explanation, all the more so as the Latin word *tabernaculum*—see also fol. 48 v., Ps. LXXXII (83), v. 7 (6)—suggests the idea of a tent even more unequivocally than the Greek word *σκηνωμα* which can denote all kinds of dwellings, including solid houses.

INSTANCE	MOTIF	GALLICAN VERSION	HEBRAICUM
Ps. cxxix (130), fol. 74 v. Based on Gall.	Sun and moon.	v. 6: A <i>custodia matutina</i> usque ad <i>noctem</i> speret Israel in Domino.	v. 6: . . . a vigilia <i>matutina</i> usque ad vigiliam <i>matutinam</i> exspectet Israel Dominum.
Ps. cxxxI (132), fol. 75 r. Based on <i>Hebr.</i> ²²	Wreath-crown held by the Psalmist. Fig. 6.	v. 18: . . . super ipsum autem effloredit <i>sanctificatio mea</i> .	v. 18: . . . super ipsum autem florebit <i>diadema ejus</i> .
Ps. cxxxvi (137), fol. 77 r. Based on <i>Hebr.</i>	Harps, not organs, suspended from willow trees.	v. 2: . . . in salicibus in medio ejus suspendimus <i>organa nostra</i> .	v. 2: Super salices in medio ejus, suspendimus <i>citharas nostras</i> .
Ps. cxxxviii (139), fol. 78 r. Based on Gall.	Cord held by the Psalmist.	v. 3: . . . semitam meam et <i>funiculum meum</i> investigasti.	v. 3: Semitam meam et <i>accubationem</i> meam eventilasti.
	Two walled cities.	v. 20: Accipient in vanitate <i>civitates tuas</i> .	v. 20: . . . elati sunt frusta <i>adversarii tui</i> .
Ps. cxxxix (140), fol. 78 v. Based on <i>Hebr.</i> ²³	Net spread across the road by means of ropes. Fig. 16.	v. 6: . . . absconderunt superbi <i>laqueum mihi</i> , et <i>funes extenderunt in laqueum</i> : juxta iter scandalum posuerunt mihi.	v. 6: Absconderunt superbi laqueum mihi, et <i>funibus extenderunt rete</i> : juxta semitam offendiculum posuerunt mihi.
Ps. cxL (141), fol. 79 r. Based on <i>Hebr.</i> ²⁴	Peasant plowing. Fig. 17.	v. 7: . . . sicut <i>crassitudo terrae erupta est super terram</i> . Dissipata sunt ossa nostra.	v. 7: Sicut <i>agricola cum scindit terram</i> : Sic dissipata sunt ossa nostra.

Thus it seems indeed probable that the artist who had to illustrate the archetype of the Utrecht Psalter had before him either a *psalterium duplex* written in two columns like Isidore's edition, or a *psalterium triplex* like the Leningrad Cod. Fol. v.I. No. 5. Of these alternatives the second seems preferable for several reasons. First, the text of the Utrecht Psalter itself, though consisting only of the Gallican version, is written in three columns; as Ludwig Traube has shown, this arrangement was rare at all times, and where it occurs outside Spain and Ireland it normally indicates either an original from the "very beginning of Christian-Roman calligraphy"—in fact an original precisely of the period to which the archetype of the Utrecht Psalter must be ascribed—or else a copy of such an original;²⁵ the scribes of Hautvillers would hardly have followed a practice which had enjoyed a "short-lived vogue" only in the fourth and fifth centuries and had become all but extinct in Italy and France, had they not tried, after the custom of their tribe, to "retain the exterior characteristics of their classical model."²⁶ Second, the unusually protracted dimensions which characterize the format of most pictures in the Utrecht Psalter and its derivatives seem to suggest that the original illustrator had to deal with a manuscript even more than

22. The horn in the Psalmist's other hand (*cornu David*) occurs both in Gall. and *Hebr.*, v. 17.

23. In the case of fol. 79 v., Ps. cxLI (142), where both the Gallican version and the *Hebraicum* have the phrase "absconderunt *laqueum mihi*," the artist represented two "enemies" covering up a kind of trap instead of the net which is normally depicted where the *Hebraicum* has *rete*. Cf. also fol. 5 r. Ps. IX (9 and 10), v. 30 (9).

24. It will be noted that the *Hebraicum* solves the diffi-

culty mentioned in DeWald, *Utrecht Psalter*, p. 61. For the net in this picture see note 16.

25. L. Traube, "Palaeographische Forschungen, Vierter Teil, I" (1904), *Abhandlungen der Historischen Klasse der Königlich Bayerischen Akademie der Wissenschaften*, xxiv, 1909, pp. 5–29, pls. I–IV, especially III and IV.

26. Traube, *loc. cit.*, p. 29: ". . . die karolingischen Abschriften, die so oft das antike Vorbild auch in Äußerlichkeiten festhalten . . ."

two columns wide. Third, the surprising appearance of the *psalterium triplex* scheme in the Canterbury Psalter—and, after it, in the Paris Psalter Lat. 8846—may well be due to a tradition, still clinging to the Utrecht Psalter itself, according to which it had been based on an original “threefold” not only in form but also in content; if so, the Canterbury Psalter would represent an attempt at reconstruction rather than a “late and artificial innovation.”²⁷

To draw conclusions from these observations must be left to “color che sanno.” However, since the *Hebraicum* sufficiently accounts for almost all the features which cannot be explained by the earlier Latin versions and current patristic traditions—including the only motif which seemed to suggest the artist’s direct acquaintance with the Septuagint²⁸—and, since it was demonstrably available, at an early time, in parallel editions along with the Gallican and pre-Gallican versions, they tend to corroborate the view of those who hold that the archetype of the Utrecht Psalter was of Latin, and not of Greek, origin.

The only argument to the contrary consists of the fact that the Utrecht Psalter adheres to what is known as the “Greek” or “Byzantine” division of the Book of Psalms, according to which one main division is made between Psalms LXXVI (77) and LXXVII (78), and not to one of the “Western” divisions, *viz.*, the “Irish” division into three parts and the “Roman” into eight.²⁹

It should be noted, however, that no one seems to know precisely how, when and where these different divisions came to be introduced and accepted, and it is fairly improbable that the “Byzantine” bipartition (which, incidentally, has no particular liturgical importance and seems to be a purely technical device) was already an established and specifically Eastern custom when the archetype of the Utrecht Psalter was made. It must be assumed, on the contrary, that at this early period there was considerable fluidity and inconsistency in this respect.³⁰ St. Jerome himself, like all the other Fathers of the Church, was not yet acquainted with any of the “Christian” divisions. He only knew the Hebrew division into five books; and while he had originally been inclined to accept it he later on, and this in the very Preface to the *Liber Psalmorum juxta Hebraicam Veritatem*, rejected every division whatsoever: “Scio quosdam putare Psalterium in quinque libros esse divisum. . . . Nos autem Hebraeorum auctoritatem secuti, et maxime apostolorum, qui semper in Novo Testamento Psalmorum librum nominant, unum volumen asserimus.”³¹

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27. It should be noted, however, that in the Canterbury Psalter definite prominence is given to the Gallican version. It occupies the outer column of each page (the sequence being Gall., Rom., *Hebr.* on the versos, and *Hebr.*, Rom., Gall. on the rectos), and it is written in much larger script so that its column is almost twice as wide as the others. In the Leningrad manuscript the sequence on the rectos is *Hebr.*, Gall., Rom. (that on the verso could not be ascertained but may well be the same), and the size of the script and the width of the columns are equal throughout as is the case, for instance, with the Livy fragments published by Traube, *loc. cit.*, and, for that matter, with the Utrecht Psalter.

28. See note 21.

29. For the various divisions of the Psalter see still A. Goldschmidt, *Der Albanipsalter in Hildesheim*, Berlin, 1895, pp. 1 ff.

30. See Goldschmidt’s judicious remarks, *loc. cit.*, p. 14: “Die Eintheilung und die Vergleichung mit anderen Handschriften führte uns zunächst zu byzantinischen Quellen; dabei muss man jedoch bedenken, dass uns weder illus-

trierte altchristliche Handschriften des Psalters noch genügende liturgische Kenntnisse jener Frühzeit zu Gebote stehen, um zu ermessen, ob diese Gattung von Psalterien mit Wortillustrationen nicht schon in Rom vorhanden war und ob dort nicht auch die Theilung des Psalters vor Psalm 77 schon eingeführt war” (Italics mine). It should also be noted that the Stuttgart Psalter, which Goldschmidt (*loc. cit.*, p. 10) adduces as a specimen of the “Byzantine bipartition,” actually combines this bipartition with the Roman division. While it is true that the most conspicuous division is made between Psalms LXXVI (77) and LXXVII (78), and while four of the minor divisions—at the beginning of Psalms CI (102), CXVIII (118), CXIX (120), and CXLIII (144)—correspond to four of the twenty Byzantine “Kathismata,” the other subdivisions constitute a complete Roman system: beginnings of Psalms XXVI (27), XXXVIII (39), LII (53), LXVIII (69), LXXX (81), XCIV (98), and CIX (110).

31. *Patrologia Latina*, 28, col. 1189 ff. Cf. the footnote of the editors and *Catholic Encyclopaedia*, XII, p. 534.



FIG. 13. Fol. 48 v. Inimici Tui Sonuerunt



FIG. 14. Fol. 71 v. Habitavi cum Tabernaculis Cedar

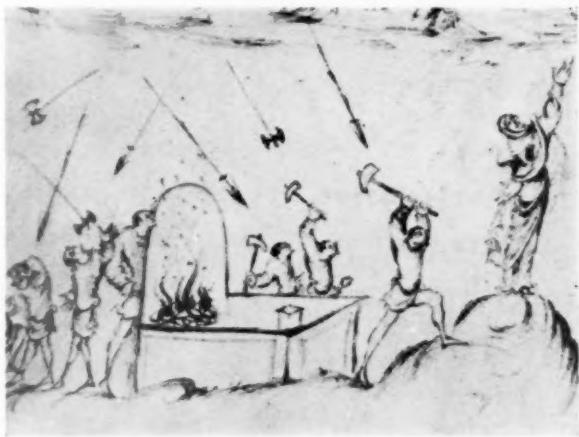


FIG. 15. Fol. 74 r. Supra Dorsum Meum Fabricaverunt Peccatores



FIG. 16. Fol. 78 v. Funibus Extenderunt Rete

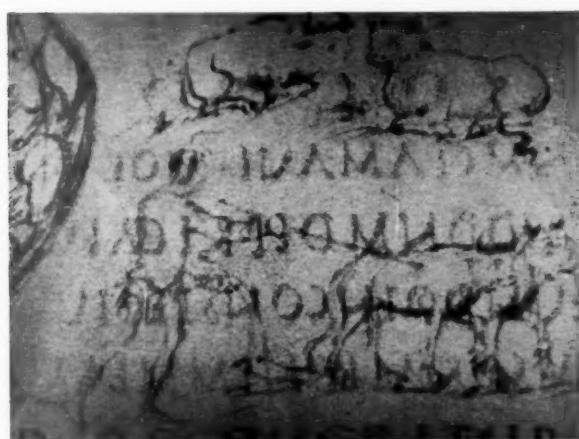


FIG. 17. Fol. 79 r. Sicut Agricola cum Scindit Terram



FIG. 18. Fol. 14 r. "Allegory of the Church"

FIGS. 13–18. DETAILS FROM Utrecht PSALTER



FIG. 1. Moses Bringing Tablets of the Law; Count of Flanders Giving Charter to Bruges: Woodcut, 1515



FIG. 3. Paris, Bibl. Nationale: Ms. Fr. 5091, fol. 37 v. Genoa Listening to Reason



FIG. 2. Paris, Bibl. Nationale: Ms. Fr. 5091, fol. 39 v. Genoa in Mourning

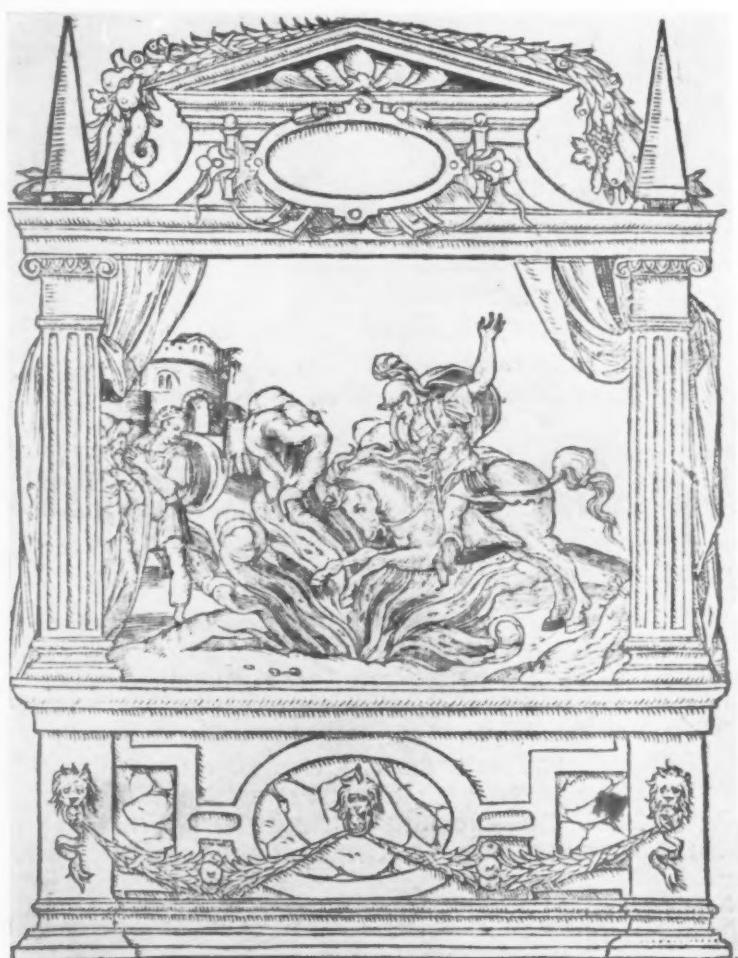


FIG. 4. The Governor of Brussels as Quintus Curtius: Woodcut, 1578

FIGS. 1-4. ILLUSTRATIONS OF TABLEAUX VIVANTS

RENAISSANCE ARTISTS IN THE SERVICE OF THE PEOPLE

POLITICAL TABLEAUX AND STREET THEATERS IN FRANCE, FLANDERS, AND ENGLAND

BY GEORGE R. KERNODLE

THAT ARTISTS played an active part in the civic affairs and the political crises of the fifteenth and sixteenth centuries comes as a startling revelation to many of us, so occupied with the pressing needs of peoples and governments today. Because none of the thousands of public pictures has come down to us, we have paid little attention to the written accounts and the few sketches and engravings made at the time. We have studied the close relationship of artists to the churches and to the courts of dukes and princes; but we have ignored the many services performed by artists for city councils, craft guilds, and merchants' organizations. Especially in France, Flanders, and England, many artists found more employment in preparing propaganda pictures for the government or the large civic clubs than they did in painting for the church or the aristocracy. Instead of adorning the walls of church or palace, they arranged large tableaux on the public streets for the entire populace. Instead of painting oil portraits of saints and princes, they arranged scenes of living actors on little street stages as a course in public education for both the people and their rulers.

Between the 1380's and 1650, in the area bounded by Lyons, Antwerp, and London, thousands of street theaters were designed and prepared by artists for public occasions. Some were but large papier-mâché and plaster replicas of the coats-of-arms of the city and of the guilds. Some were flat painted pictures set up like billboards. But most were *tableaux vivants* fitted with doorways or curtains, proscenium frames, and a background of tapestries or painted scenery, and presented by living actors dressed in the finest costumes. While some of them served merely as decorative dramatizations of popular legendary and historical characters, the city leaders soon saw the enormous educational possibilities and asked the artists to use these tableaux for civic purposes—not only to prove that one leader was better than another, that one religious party was protecting the people from the tyranny of another, or that one group of merchants had greater prestige than their rivals, but also to hint, to threaten, and to cajole the prince into granting policies the people wanted. On some occasions tableaux were used to prove to conquered peoples that they would be wise and happy to collaborate with the conqueror. Many Renaissance artists took a far larger part in serving the public needs of their governments and their fellow citizens than we have usually supposed.

The principal occasion for these street pictures was the royal entry, or official visit of a ruler to the more important cities of his realm. The triumphal entries of the French kings into Reims to be crowned, and immediately afterwards into Paris, were almost as important as the coronation itself. The rulers of the Low Countries, whether Dukes of Burgundy or Hapsburgs, were not considered rulers until they had made an official entry into each of the more prominent cities. When the Emperor Charles V wished to abdicate in favor of his son Philip II of Spain, he presented his son in every city of any size in the Low Countries.

No conqueror, whether Bourbon, Hapsburg, or Hitler, has considered his conquest complete until he has ridden in triumph through the streets of the conquered cities.

The Renaissance cities, for their part of the ceremony, decorated the streets not only with banners, tapestries, and torches but also with *tableaux vivants*. The unveiling of the tableau, with an oration to explain it to the prince, or a little play or opera performed, was one of the most impressive rituals of the time. Neither the prince nor any of the thousands who saw it would ever forget it. It was extremely important that the right subjects be chosen and the most beautiful effects possible be achieved. Sometimes the city fathers and the trade associations mortgaged their income for years to pay for the stages. The best writers planned the subjects and wrote the orations and speeches, the best artists were asked to prepare designs, and hundreds of carpenters, plaster workers, painters, and carvers were hired for the execution of the designs. The subjects were chosen for four main propaganda purposes: to flatter the king, to advertise the glories of the city or a group of merchants, to give a definite message to the king and commit him publicly to a certain policy, or on some occasions to make a conquering prince more acceptable to the conquered.

In glamourizing the king, the *tableaux vivants* served a most important political purpose by knitting together the citizens and their sovereign. Both king and townspeople looked with pride on tableaux of the glorious ancestors and predecessors of the new ruler. Citizens were made to participate in the glory of the past or in the glamour of the exploits of the new prince. When a king of France entered Reims for the coronation, he passed by tableaux of the coronation of Pharamond, the first king of France, of Clovis, the first Christian king, and of St. Louis.¹ In 1468 the artists of Bruges added glory to the arrival of Margaret of York to marry Charles the Bold, Duke of Burgundy, by arranging tableaux of Adam and Eve, of Cleopatra's marriage to King Alexander, of the marriage at Cana, of the marriage of Esther, and a dramatization of the Song of Solomon.² The arrival of any new queen, especially one who brought new territories to the realm, was celebrated by tableaux of the Queen of Sheba bringing gifts to Solomon³—likewise one of the most frequent subjects painted on marriage chests.

Famous people of the same name were often presented in tableaux to honor the latest prince. Tableaux of St. Catherine welcomed to London both Queen Catherine in 1421 and Catherine of Aragon in 1501, and tableaux of St. Margaret welcomed Queen Margaret to Coventry in 1456.⁴ Other artists—sculptors perhaps—preferred to present rows of single figures in arches. An arcade of five living Annes of the Old Testament welcomed Anne of Brittany to Paris in 1504.⁵ All over the Netherlands, and in England as well, the famous Philips of history gathered to honor Philip II, King of Spain, Count of Flanders, and husband of Queen Mary.⁶ In other shows the artists presented genealogical trees, the civic equivalents of the Tree of Jesse, often with living actors on the more important branches. Two rose trees, a white and a red, united at the top, were shown in a street picture when Henry VIII came to the throne, and again in 1557 with an added branch holding Elizabeth.⁷

1. For the entries of Louis XII in 1498, of Francis I in 1515, and of Henry II in 1548, see the accounts printed in Theodore Godefroy, *Le ceremonial françois*, Paris, 1642, Vol. I. I give a general account of the *tableaux vivants* in my book *From Art to Theatre: Form and Convention in the Renaissance*, to be published soon.

2. See British Museum Add. Ms. 6113, and Olivier de la Marche, *Mémoires*, Société de l'Histoire de France, Paris, 1883-88, Vol. IV, pp. 95-144. The expense accounts were published by L. E. S. J. Marquis de Laborde, *Les Ducs de*

Bourgogne, Paris, 1849-52, Vol. II, pp. 293 ff.

3. Charles Read Baskerville, *Pierre Gringoire's Pageants for the Entry of Mary Tudor into Paris*, Chicago, 1934, p. xxvi.

4. Robert Withington, *English Pageantry*, Cambridge, Mass., 1918, Vol. I, pp. 149 f. and 167.

5. Godefroy, *op. cit.*, I, pp. 694 ff.

6. Withington, *op. cit.*, I, p. 192.

7. Withington, *op. cit.*, I, p. 200.

Shakespeare imitated such a tableau in *I Henry VI*, Act II, Sc. iv, in a scene of the two rivals plucking red and white roses as emblems.

Sometimes the artist was called on to advertise the grandeur, the generosity, or the antiquity of the city or of some trade or group of merchants. These animated billboards were not usually very specific but were of the kind the modern advertiser calls "good-will" advertising. A fountain of wine, decorated as a pelican or an *Agnus Dei*, gave a religious aura to the generosity of the city toward its citizens and guests. By drinking the wine they took part in a civic communion. In Antwerp and Ghent and in a number of English cities, the legendary founder, often a giant, might give the greetings to the entering prince.⁸ The trade guilds vied with each other in shows. The simplest kind would reproduce the coat-of-arms in a painting, in plaster, or with living figures; the more ambitious guilds would show the life of their patron saint or of a famous mayor or other person who had been a member. When they paid for pictures of general civic interest, as at Bruges in 1515, they usually added in the framing device emblems, statues, and even whole scenes representing the mysteries of their own trade.⁹ At Paris the University regularly presented a tableau or was represented by symbolic figures in the tableaux presented by others.¹⁰ At Caen in 1532, Francis I saw a show of Minerva distributing the fruits of study and the waters of science to the five faculties of the university.¹¹ The city of Rotterdam in 1549 proudly displayed to Philip II a tableau of its distinguished son Erasmus, who presented verses to the king.¹²

The colonies of foreign merchants took an especially important part in international propaganda and education. They not only made characters and legends of their own countries widely known through street tableaux but often imported artists and craftsmen from home to prepare the shows. In the fifteenth century the Italian merchant Thomaso Portinari, agent of the Medici in Bruges, patronized the Flemish artist Hugo van der Goes,¹³ but by 1515, when Charles V made his entry into Bruges, the Italian merchants together financed several elaborate triumphal arches with *tableaux vivants*, designed and executed by Italian artists.¹⁴ This was the first time most Flemish people had seen the new Renaissance architecture of Italy. Such an entry was probably as important in architectural and artistic education as a modern World's Fair. While the rich could import artists to make their private paintings, buildings, and tombs, these were rarely seen by the general public. The tableaux and structures put up for the royal entries were designed for the entire population.

But the artists joined in far more controversial issues than competitive good-will advertising. They often used their tableaux to make special appeals to the prince. In 1440 the citizens of Bruges had a special reason for dreading the arrival of the Duke of Burgundy. They had recently joined in a revolt against him. When he approached the city, they not only sent out their city fathers to meet him with bared heads and feet, but their artists had lined the streets with living tableaux of ancient rulers who showed clemency to their erring subjects.¹⁵ Again in 1515 Bruges needed special consideration from the ruler. For several

8. Withington, *op. cit.*, I, pp. 50 ff.

9. Remy du Puys, *La tryumphante et solennelle entrée . . . Charles . . . en sa ville de Bruges . . .* [Paris, 1515]. Reprinted by the Société d'Émulation de Bruges, Bruges, 1850.

10. Godefroy, *op. cit.*, *passim*.

11. M. L. Puiseux, *La Cavalcade historique de Caen en 1863*, Caen, 1863.

12. Calvete de Estrella, *El felicissimo viaje d'el . . . Principe D. Philippe . . .*, Antwerp, 1552, pp. 276 ff.

13. J. A. Crowe and G. B. Cavalcaselle, *The Early Flem-*

ish Painters, London, 1872, pp. 155 f.

14. Remys du Puys, *op. cit.*; Louis P. Gachard, *Collection des voyages des souverains des Pays-Bas*, Brussels, 1876, Vol. I, pp. 581 ff. and Vol. II, pp. 531 ff. See also W. Kronig, *Der italienische Einfluss in der flämischen Malerei im ersten Drittel des 16. Jahrhunderts*, Würzburg, 1936, and J. de Jong, *Architektur bij de Nederlandsche schilders voor de hervorming*, The Hague, 1935.

15. *Cronique van Vlaenderen*, Printed by Andreas Wydts, Bruges, 1736, Vol. II, pp. 105-111.

decades the river to the sea had been silting up. Once the richest trading city in the world, Bruges saw its business firms leave one by one. The Fuggers of Augsburg had already moved their office to Antwerp, and soon the Hanseatic League was to move its factories and warehouses there. When the young prince Charles V, grandson of the Emperor and heir of both the Netherlands and Spain, came to be installed as Count of Flanders, Bruges outdid herself. On stages beside the way and on triumphal arches across the streets, she arranged a whole series of tableaux designed to convince the prince he should take action. Each tableau was paired with a scene from biblical or ancient history to reinforce the idea, just as New Testament scenes in many altars and in the woodcuts of the *Biblia Pauperum* were surrounded by scenes from the Old Testament as prefigurations. Scores of artisans were hired to build the tableaux, for each pair was enclosed in an independent box made to resemble a prominent building, or copying some of the fanciful architectural structures we see in many sixteenth century Flemish paintings. Ten artists are listed in the expense accounts as receiving pay for making sketches and painting the tableaux, pavilions, castles, and statues and animal figures. Those ten were Jan Fabiaen, Lenaert van Cricki, Aernaut Zaetaert, Jan van der State, Dieric Claerbout, Willem d'Hollandre, Heindric Zoeman, Jan Blandein, Dieric Cockuut, and Donaes Fabiaen.¹⁶

The first show the prince saw resembled the façade of a building. On the upper level actors represented Our Lady and a number of Prophets and Counts and Countesses of Flanders, in order to lend both religious and historical dignity. On the lower level were two tableaux. One showed the bringing to Bruges of the blood of the Savior—the relic whose attraction had laid the foundation of the prosperity of the city. The other showed the biblical prefiguration: Herodius giving the Holy Cross to the city of Jerusalem. In the second, an imitation of the Cloth Hall, the Prince saw Louis de Nevers, an early Count of Flanders, giving Bruges a charter with many special privileges. The biblical prefiguration reinforced the sanctity of that charter, in the way that a lawyer cites precedents, by showing Moses bringing from the mountain the Tablets of the Law (Fig. 1).¹⁷ In a third tableau, another count, Louis de Mâle, caught a stream of red wine coming from the figure of Bruges, showing that the city was willing to give her blood as well as her obedience to the count. The other side showed the Children of Israel bringing gifts to Moses.

The next group of pictures dramatized the immediate problem. One allegorical picture represented Riches standing behind the Graces and the Arts, with an inscription explaining that though the arts stood first they must be supported by wealth. Then the prince was led before three tableaux which went to the heart of the situation. The first showed a despairing lady marked Bruges being deserted by Business and Merchandise. It was paired with a biblical scene of Jacob leaving Laban with all his goods and family. The inscription pointed out that afterwards he became impoverished and reduced to nothing. The next show did more than present the problem: it suggested the solution. In it Law and Religion were forcibly preventing Business and Merchandise from deserting the lady. In the third, a poverty-stricken Bruges, at the bottom of the wheel of fortune, stepped forward and presented a petition to the prince to turn the wheel and bring her up again.¹⁸

In the religious conflicts of the middle of the century, the artists took even more heated part. When Mary came to the English throne and then when her husband Philip II of Spain was received in London, the tableaux proclaimed the unity with Rome and with Spain.

16. Gachard, *op. cit.*, II, pp. 535 ff.

17. Reproduced in Remy du Puy, *op. cit.*

18. *Id., op. cit.* The illustration of this last is repro-

duced by Lucien Dubech, *Histoire générale illustrée du théâtre*, Paris, 1931, Vol. II, p. 133.

But when Elizabeth entered London, the other side was dramatized in pictures all along the way. The chronicler gives us a quite touching description of Elizabeth receiving from a character Truth in a *tableau vivant* an English Bible.¹⁹

Edinburgh gave Mary a sincere welcome on her return from France in 1561, but wanted to make it quite clear that the Catholicism of France was hated. As a warning of the vengeance of God on idolaters, a tableau was presented of Korah, Dathan, and Abiram destroyed while offering strange fire upon an altar. A still more significant tableau had been prepared—a priest burnt at the altar while elevating the Host—but the Earl of Huntley had persuaded the authorities, with some difficulty, to content themselves with the one. When the young boy-king James was received in Edinburgh in 1579, the living pictures and statues, with the help of a preacher, gave him a whole course of education ending in a Renaissance entertainment. A tableau of the Judgment of Solomon taught him wisdom. A genealogy of the Scottish kings and his own horoscope were carefully explained to him by the character Ptolemy. A boy descending from above the city gates to present him with the keys to the city, while Dame Music and her scholars played, must have been as impressive as the Angel Gabriel descending to Mary in the many religious pageants. Then he was led before a tableau of all the virtues, and each one gave him a short address. Dame Religion then led him into a church, where a preacher made a "notable exhortation unto him, for the embracing of Religion, and all her Cardinall Virtewis, and of all other Morall Vertewis. Thereafter he came furth, and maid progres to the Mercat Croce whare he beheld Bacchus with his magnifits liberalitie and plentie, distributing of his liquor to all passengers and beholders, in sic apperance as was pleasant to see."²⁰

In Flanders the artists presented now Heresy stamped out, now Inquisition with a bloody face, according to which of the shifting factions was in power. So much Reformation doctrine had crept into the tableaux which the painters' Guild of St. Luke put on in conjunction with the Chambers of Rhetoric in Ghent in 1539 that the authorities began to scrutinize all plays and tableaux very carefully.²¹ When Philip II was received at Amsterdam in 1549, the Rhetoricians and artists presented a properly orthodox tableau of Faith binding Heresy and Error with hook and chain.²² In the decades that followed, the conflict burst into violence, and artists were active on both sides. When the Protestants were victorious and Brussels welcomed William of Orange in 1577, the artists adorned the streets with tableaux of David, Moses, and Joseph saving the people. To emphasize that these biblical scenes had contemporary reference, the artists placed in each an actor representing a contemporary merchant or working man, just as they might place a portrait of a donor in a religious painting.²³ The very next year, however, the Catholic nobles regained control and brought in Archduke Matthias of Austria as governor. Now artists (we hope not the same artists) presented tableaux comparing the new ruler to Scipio Africanus and representing him as Quintus Curtius plunging into the yawning abyss in order to save his people from pestilence (Fig. 4).²⁴

The most curiously modern propaganda pictures appeared on the streets of Genoa in 1507, when the conqueror Louis XII of France made his triumphal entry. Not only was there a splendid pageant and parade of the victorious monarch and his forces, but the

19. Withington, *op. cit.*, I, p. 202.

20. *Documents Relative to the Reception at Edinburgh of the Kings and Queens of Scotland*, Edinburgh, 1822, pp. 27 ff.

21. J. Loosjes, *De invloed der rederijkers op de hervorming*, Utrecht, 1909, p. 14.

22. Calvete de Estrella, *op. cit.*, pp. 280 ff.

23. Jan Baptiste Houwaert, *De triumphante inkomste des prince van Oranje*, 23 Sept. 1577, Antwerp, 1578.

24. Jan Baptiste Houwaert, *Sommare beschrijvinghe van de triumphelijke incomst van den aerts-hertoge Matthias . . . 1578*, Antwerp, 1579, pp. 80-85 and 89-93; the illustration of the governor as Curtius is on p. 91.

streets and squares of the city were adorned with tableaux showing the wisdom of a cheerful acceptance of the new regime. In a memorial manuscript prepared for the king are preserved several miniatures showing how the tableaux had looked.²⁵ One pair of miniatures is especially noteworthy. The first shows the tableau of a maiden as Genoa in mourning, in a room draped in black, giving way to grief and sorrow (Fig. 2). She is surrounded by evil counselors—Despair, Anger, and Grief. That tableau was immediately followed by one showing the same room stripped of its black hangings and a joyful Genoa listening to Reason (Fig. 3). To make a properly impressive effect, the Lady Reason has borrowed the typical appearance of Our Lady: the costume, the kind smile, and the surrounding glory of clouds.

We do not know what Italian Quisling paid for those Genoa tableaux or what artists designed them, and there was no Vasari to tell us of the civic activities of artists in France, Flanders, and England. In few cases do we know the names of the designers of any of these temporary tableaux of the fifteenth and sixteenth centuries. But we are sure that the best artists available were hired, and all witnesses have the highest praise for the beauty of the shows and the painstaking care with which they were finished. We know that in the Low Countries, Hugo van der Goes, Carel van Mander, and Rubens designed street tableaux; in France, Il Rosso, Primaticcio, Bernard Solomon, Philibert Delorme, and Jean Cousin; in England, Holbein. Likewise, some of the more prominent writers were engaged in planning the shows and writing speeches: Lydgate, Gringoire, Marot, Peele, Gascoigne, Jonson, and Middleton.

If we consider only the pictures that have come down to us, we think of the Renaissance painters as men dwelling apart from the many wars, the religious controversies, and the political conflict of the time. Perhaps some artists did paint only their private dreams. But others spent a good part of their time and energies in planning and executing these temporary street tableaux—tableaux which served not only as an illustrated story-book to glamourize kings for an illiterate populace but also as propaganda tracts to influence both king and people in the important public questions of the day.

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25. Jehan Desmarestz, *La magnanime victoire . . . contre les Genoveys ses rebelles*, Paris, Bibl. Nat. Ms. Fr. 5091, fols. 37 v and 39 v.

NEW RESEARCHES ON CHINESE BRONZES

BY CATHERINE GRASSL

THEORIES concerning the development of Chinese bronzes have been presented by many scholars, the most important of whom undoubtedly are Bernard Karlgren and Max Loehr. Karlgren determined for us by aid of inscriptions those bronzes that belong to the Yin (1500-1122), and to the Chou eras (1122-771).¹ Using the same catalogues of Chinese collections that Karlgren employed, and his statistical methods,² I have reviewed the different types of bronzes and have come to a conclusion different from his. In this article, however, I shall be concerned only with Yin and early Chou vessels (first half of Western Chou, 1122-947).

Karlgren believes that the development of bronze ornament began at a very advanced stage. This is in itself highly improbable. No art ever began at a highly developed stage. Bronze art must have had a beginning somewhere and we should be able to find that beginning among the bronzes we are about to study. Karlgren divides the ornament upon the bronzes into a primary style and a secondary style, consisting of *A* and *B* elements. There is a third style of ornament which, unable to class it under either *A* or *B*, he places in the neutral *C* category.³ The primary or *A* style is mainly an animal style plastically rendered; whereas the secondary or *B* style is geometric, often flat and sometimes incised. The primary style is characterized by a tendency to cover the whole body with décor leaving no large surfaces bare; while the *B* style often leaves the principal surface bare. Karlgren records that "the Primary style must have existed for centuries before the Secondary style was born."⁴ He also believes that there were introduced into the secondary or *B* style four new elements: the circle band, compound lozenges, interlocked T's, and vertical ribs. Likewise he indicates that cicada and vertical dragons disappeared in this style and that spikes and squares with crescents made their appearance. He believes that historically, "the *B* style is to a large extent directly derived from the *A* style."⁵ Besides the new elements noted above the *B* style has the *t'aot'ie* which has become "stylized to such a degree that it is not only distorted and deteriorated but frankly dissolved."⁶ Thus he believes that the animal triple band and the eyed spiral band of the *B* style are directly derived from the fundamental *A* style *t'aot'ie*. Moreover, he considers the de-tailed bird to be also a corrupted form of the normal bird. In conclusion, he says: "Careful study of the course of evolution from mask or bodied *t'aot'ie* via deformed or dragonized *t'aot'ie* to dissolved *t'aot'ie* or animal triple band, and similarly of the evolution from primary bird to de-tailed bird, convinces us that the *A* style is primary, the *B* style secondary, the latter being based on the former."⁷

Karlgren's interpretation of the development of bronze ornament is contrary to that

1. "Yin and Chou in Chinese Bronzes," *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), viii, 1936, pp. 9-154.

2. Without the exacting labor that Karlgren put into his article, "New Studies on Chinese Bronzes," *Bulletin of the Museum of Far Eastern Antiquities* (Stockholm), ix, 1937, pp. 9-117, my researches could not have been accomplished. All my conclusions are based on this article. I also wish to acknowledge my indebtedness for the friendly criticisms of Dr. Ludwig Bachhofer, under whose supervision

this article was written, and Dr. Lawrence Sickman. The kind assistance of Mr. D. Thurston Griggs in editing the manuscript was also greatly appreciated.

3. For a description of these elements, see *ibid.*, pp. 14-21.

4. *Ibid.*, p. 88.

5. *Ibid.*, p. 76.

6. *Ibid.*

7. *Ibid.*, p. 78.

presented by Max Loehr,⁸ whose theory is that the very earliest bronze ornaments resemble in design the Pan-shan and Ma-Chang pottery of the Neolithic period. The patterns which he believes are related to the patterns on the pottery of the Neolithic period are the interlocked T's, lozenges, and meanders. There is continual movement in the first *t'aot'ie* patterns; only the eyes are static. The relief is flat; the eyes are the only plastic element. First the *t'aot'ie* began with an eye amid a maze of spirals, then it took on form. The face became clearer; horns, ears, and eyebrows appeared in consecutive order. Eventually the face lost its fluid quality and became centered. The relief grew more plastic. Lastly, the *t'aot'ie* deteriorated; the ears, eyes, and horns became separate entities, and the *t'aot'ie* as a unified face disappeared.

A NEW ANALYSIS OF CHINESE BRONZE ORNAMENT

As a fundamental basis for his chronological arrangement, Karlgren tabulated and analyzed 1300 vessels. Using the same 1300 vessels, I find that a different chronological arrangement may be made. Karlgren establishes the fact that, with certain exceptions, *A* elements never combine with *B* elements and vice versa. The *C* elements combine with both *A* and *B* elements. He comes to this conclusion on the basis of 517 vessels having on their surfaces *A* elements but no *B* elements, and 549 vessels having *B* elements but no *A* elements. Only fourteen vessels have present on their surface both *A* and *B* elements. He believes that this is enough statistical proof that *A* and *B* elements are not combinable or interchangeable in the same vessel. His conclusion is that "they are not combinable because they belong to two different styles."⁹ But may there not be a reason why certain *A* and *B* elements do not combine? Using the 1300 vessels that Karlgren has so accurately reviewed for us,¹⁰ I have singled out the *B* elements and in Table 1 can be seen the results of my analysis. I have divided the *B* elements into three categories: first, those which appear only on the body of vessels; second, those which appear on the neck band or foot band where the belly is bare; and third, those which appear on neck band and foot band where the belly is covered with any of the other *A*, *B*, or *C* elements. From the table, it is not surprising to find that compound lozenges and spikes, interlocked T's, dissolved *t'aot'ies*, and vertical ribs (*B* elements), with but one exception,¹¹ never occur on the neck band or foot band of any vessel. They always are found on the principal surface, the belly. The chance of their appearing on the neck band or foot band of vessels with *A* elements is therefore slight. Thus it is apparent that Karlgren's statement that *A* and *B* elements are not interchangeable or combinable fails to solve the problem. These four *B* elements are not interchangeable or combinable with *A* elements, because the disposition and arrangement of their décor permits these *B* elements to appear only on the principal surface of a vessel, where also the *A* elements appear, thus making it impossible for both to appear on the same vessel at the same time.

Karlgren has noted that such *B* elements as de-tailed birds, eyed band with diagonals, compound lozenges, squares with crescents, play an extremely large part as decoration for the upper and lower borders of the vessels. He states: "If, now, the *A* elements and *B* elements were interchangeable and combinable, we should expect that a considerable number of the former vessels, i.e., the 342 with *A* elements on the principal surface, would have in their upper and lower belts (bands) one or other of the elements *B* 2—*B* 8, so common in

8. "Beiträge zur Chronologie der älteren chinesischen Bronzen," *Ostasiatische Zeitschrift*, 1936, pp. 4-41.

9. "New Studies," p. 75.

10. For a description of vessels, see *ibid.*, pp. 22-70.

11. A Chi in *Pao-Yün lou i-k'i t'u-lu*, 84, has a dissolved *t'aot'ie* on its neck belt. However the dissolved *t'aot'ie* on close examination could equally well be called animal triple band or a dragonized *t'aot'ie*.

this very function,"¹² and vice versa. Let us review these *B* elements and note the disposition of their décor upon the bronze vessels (see Tables 2 and 3). The eyed band with diagonals appears once with the bovine *t'aot'ie* (265),¹³ an *A* element, and thirty-nine times on vessels with the principal surface bare (128, 177, 178, 336, 338, 344-348, 513, 514, 525, 526, 593, 596-600, 633, 904, 909, 910, 911-914, 943-951, 1241, 1242). It does not appear on neck band or foot band of vessels with *B* elements on their principal surface. De-tailed birds appear once with a bodied *t'aot'ie* (1278), twice with a bovine *t'aot'ie* (1235, 1236), once with cicadas¹⁴ (all three are *A* elements), once with interlocked T's,¹⁵ once with vertical ribs (361) (both *B* elements), and forty times on vessels with the principal surface bare (119-127, 339-348, 515-523, 633, 896-902, 1235, 1236, 1251, 1252). Compound lozenges appear once with the dissolved *t'aot'ie* (1286), twice with compound lozenges and spikes (377, 437), and once with the dragonized *t'aot'ie* (443)—two *B* and one *C* element—and twenty-two times with vessels that have their principal surface bare (179, 355, 438, 440, 527-538, 545, 546, 905, 906, 917). Square with crescents appears once with the bodied *t'aot'ie* (881), once with the dissolved *t'aot'ie* (100), and twice on vessels with the principal surface bare (362, 363).

How are we to interpret these facts? It appears that the reason why *A* elements and *B* elements, de-tailed birds, etc., are not interchangeable or combinable is that these *B* elements have a tendency to appear only on vessels whose principal surface is bare. But actually, these same *B* elements appear *as many times* with *A* elements as they do with other *B* elements. How, then, can one say of the de-tailed bird, eyed band with diagonals, and square with crescents that, being *B* elements, they are non-interchangeable and non-combinable with *A* elements? One can only say of them that they appear on vessels with the principal surface bare.

Turning now to the *A* elements, what can we say of such a typical *A* element as the cicada, which surely can be called nothing but a neck belt ornament? It appears only once with the bodied *t'aot'ie* (212a), not at all with the mask and bovine *t'aot'ies*, and fifteen times on one vessel type, the Ku: eight times with the *t'aot'ie* (775-782), three times with the deformed *t'aot'ie* (828-830), and four times with the dissolved *t'aot'ie* (877-880). Karlgren states: "The Secondary style has introduced four new fundamentally important elements of a geometrical order: *B* 6 the circle band, *B* 8 the compound lozenges, *B* 10 the interlocked T's, and *B* 11 the vertical ribs. . . . There are two more changes and two more important novelties which should be observed. Firstly, the *A* style element cicadas and vertical dragons have entirely disappeared."¹⁶ If cicadas have entirely disappeared, we should not expect to find any cicadas as neck band or foot band ornament with *B* elements, but on the contrary we do find the cicada appearing four times with the dissolved *t'aot'ie* (877-880), and five times on vessels with the principal surface bare (40, 74, 211).¹⁷ If the vertical dragon had entirely disappeared, we should not expect to find it on Chou inscribed vessels, but we do find it appearing on three vessels with Chou inscriptions (2, 190, and 1188). Oddly enough, the newly introduced *B* elements, circle band and compound lozenges, claim no Chou inscriptions.

12. *Loc. cit.*, p. 73.

13. I am using the same numbers Karlgren (*loc. cit.*, pp. 22-69) uses for each vessel.

14. This vessel is unrecorded in Karlgren's "New Studies." It can be found in his "Yin and Chou in Chinese Bronzes," pl. xvi.

15. The same vessel as that in footnote 14.

16. "New Studies," p. 86.

17. The cicada appears on two vessels not recorded in Karlgren's article: once on a P'an vessel, a type which Karlgren emphasizes is very late, and once on a vessel belonging to the period of Western Chou which has on its neck belt de-tailed birds, on its belly interlocked T's and on its foot belt cicadas. Both these vessels are illustrated in Karlgren's "Yin and Chou in Chinese Bronzes," pl. xvi, B. 41 and B. 22.

The Hien steamer is an interesting vessel in regard to *A* and *B* elements. Karlgren states: "Curiously enough, I know of no Hien steamer with an *A*-style décor."¹⁸ I take it for granted that the upper and lower parts of this vessel were made at the same time. It would be an odd coincidence, indeed, if the two parts of the vessel were made centuries apart as Karlgren apparently thinks, for he makes no mention of the lower half of the Hien steamer. Yet if we take this lower half into account, we find the animal triple band appearing twenty-one times with every variety of fully developed and partially distorted bovine *t'aot'ie* (1214-1234). Here also we find the de-tailed bird (1235, 1236), and the **S** dragon (1238), both late ornament, appearing with the bovine *t'aot'ie*. These facts Karlgren ignores entirely.

We see, therefore, that there is something wrong with Karlgren's classification of ornaments into *A* and *B* elements that are not interchangeable. In the first place we have observed that interlocked T's, dissolved *t'aot'ies*, compound lozenges and spikes, and vertical ribs could not, because of their arrangement, be interchangeable with *A* elements. Secondly, we have observed that four *B* elements: de-tailed birds, square with crescents, eyed band with diagonals, and compound lozenges, tend to appear on vessels with the belly bare; and when they do appear on other types, the ornament is equally divided among *A* and *B* type vessels. We have seen in the case of the Hien steamer that the animal triple band and the de-tailed bird appear with the bovine *t'aot'ie* not once but many times. We have also noted that the cicada, an *A* element, appears with the dissolved *t'aot'ie*, interlocked T's, circle band, and de-tailed birds, all *B* elements. Thus it is apparent that for most of the *B* elements, Karlgren's classification seems to have lost its significance. The division of ornament is not so fixed or clear as he would have us believe. It is just as plausible in the light of these new facts to place interlocked T's, dissolved *t'aot'ies*, dragonized *t'aot'ies*, and compound lozenges and spikes¹⁹ at the beginning of the evolution as in the middle.

When dividing his ornament into *A* and *B* categories, Karlgren holds that the *B* elements are derived from the *A* elements. He bases his theory on the evolution of realistic *t'aot'ies* through various stages to geometrized dissolved *t'aot'ies* or a geometrized animal triple band. The desire to geometrize his ornament caused the artist to invent the interlocked T's, compound lozenges and spikes, and so forth, and place this new décor on vessels with flat surfaces, where the curved *t'aot'ie* seemed not to fit. Furthermore, Karlgren suggests there may have arisen a rival house of casters who created the new, or *B* style. The older house would have remained conservative, and thus he accounts for the fact that *A* and *B* styles were maintained side by side. He stresses the fact that the *B* style is not a primitive style because it does not have uni-décor, that is, vessels where the principal surface is entirely ornamented by a single element. He maintains that vessels like the P'ou type are much too complicated for the primitive artist to have created, since they are separated into too many bands: two neck belts, a belly band, and a foot belt, all indicating an advanced bronze art. Are all these points valid for the derivation of the *B* style from the *A* style? The only adequate reasons given by Karlgren for the derivation of the *B* style from the *A* style are: first, the evolution of the *t'aot'ie* into the dissolved *t'aot'ie*; and second, the greater number of Chou inscriptions found on the *B* type vessels than on the *A* type vessels. Before I attempt to show that the dissolved *t'aot'ie* could not have evolved from

18. "New Studies," p. 81.

19. It is interesting to note here that the late *B* and *C* ornaments such as **S** dragon, de-tailed bird, feathered

dragon, eyed band with diagonals, etc., appear very rarely with the above-mentioned *B* elements.

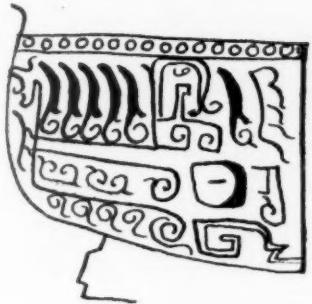


FIG. 1

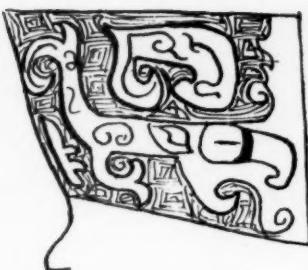


FIG. 2



FIG. 3



FIG. 4

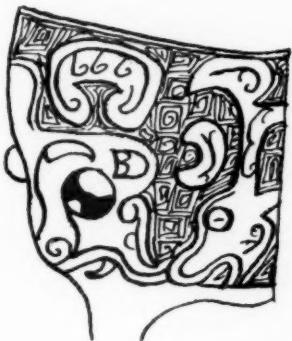


FIG. 5



FIG. 6



FIG. 7

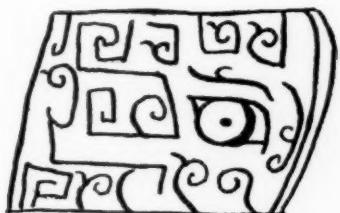


FIG. 8



FIG. 9

YIN INSCRIBED T'AO TIES

FIG. 1. *Bulletin of the Museum of Far Eastern Antiquities*, IX, Pl. XXXIX (374). FIG. 2. *B.M.F.E.A.*, VIII, Pl. VI, A 38 (77). FIG. 3. *B.M.F.E.A.*, VIII, Pl. XXIII, A 287 (617). FIG. 4. *B.M.F.E.A.*, VIII, Pl. VIII, A 260 (1235). FIG. 5. *B.M.F.E.A.*, VIII, Pl. III, A 28 (221). FIG. 6. *B.M.F.E.A.*, VIII, Pl. III, A 246 (69). FIG. 7. *B.M.F.E.A.*, VIII, Pl. IX, A 159 (1122). FIG. 8. *B.M.F.E.A.*, VIII, Pl. X, A 170; also Umehara I: 65. FIG. 9. *B.M.F.E.A.*, VIII, Pl. XVIII, A 54 (1270).



FIG. 10



FIG. 11



FIG. 12



FIG. 13

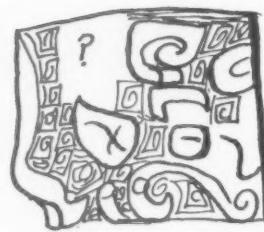


FIG. 14



FIG. 15



FIG. 16



FIG. 17



FIG. 18



FIG. 19



FIG. 20



FIG. 21

CHOU INSCRIBED T'AOT'IES

FIG. 10. *B.M.F.E.A.*, vi, Pl. xi, (2). FIG. 11. Pao Yün 8, or Senoku 1: 1 (190, 204). FIG. 12. *Exhibition*, Pl. 5-247 (1276). FIG. 13. Heng 9 (72). FIG. 14. Shant'u 131 (677). FIG. 15. Senoku II: 88 (1188). FIG. 16. Senoku I: 14 (1238). FIG. 17. *B.M.F.E.A.*, viii, Pl. xii, E 40 (284). FIG. 18. *B.M.F.E.A.*, viii, Pl. x, B 32 (1230). FIG. 19. Sumitomo II: 86 (1187). FIG. 20. Shant'u 127 (923). FIG. 21. Tsun 2: 20 (165).

the bodied, mask, or bovine types, I wish to describe the various *t'aot'ies* as they appeared in the Yin and Chou era.

A DESCRIPTION OF CHOU AND YIN *T'AOT'IES*

So that we may have some idea of the types of *t'aot'ies* existing in the Yin and Chou eras, I am reproducing on one plate (Figs. 1-9) some Yin inscribed *t'aot'ies* and on another (Figs. 10-21) all the Chou inscribed *t'aot'ies* recorded by Karlgren. A comparison of the two plates will give an idea of the styles of the two periods: that of the Yin era is vigorous, full of movement, forceful; that of the Chou is efflorescent, decadent, static. A comparison of the individual *t'aot'ies* will bring out these qualities. Figure 1 is a dissolved *t'aot'ie* that has the appearance of a feathered dragon. The rendering of the body, tail, horns, quills, and mouth in very low relief enhances the plastic quality of the eyes. The whole pattern of running lines is full of movement; only the eyes are static. We look in vain among the Chou *t'aot'ies* for a similar type, and the only one that resembles it in any way is Figure 20, a dragonized *t'aot'ie* which appears as neck belt ornament on a Chi. Here the lines have become mere formula, and we can scarcely recognize the dragon that once existed so vigorously in Figure 1. Figure 2, a Yin bodied *t'aot'ie*, is forceful, dynamic, full of savage power. The Chou *t'aot'ie* in Figure 17 has lost the strength and savagery of its earlier prototype and has become severely classic and finished. The décor of Figure 2 is slightly plastic with rounded contours that are perfectly bare. Figure 17 shows the beginning of that characteristic that so well identifies the Chou era—a formal floral quality that embellishes the horns and extremities of the dragon. This characteristic is well exemplified in the Chou *t'aot'ies*, Figures 10 and 12. The former, decadent and overripe, is in full contrast to Figures 3 and 5, Yin *t'aot'ies*, which emanate power and beauty, and are at the very height of their development. In both Figures 5 and 10, the body has become detached from the head, and the place of the body has been taken by a vertical dragon. Figure 11 is one of those *t'aot'ies* that must have been made at the very beginning of the Chou era, for it still retains the forcefulness of the Yin type *t'aot'ies* and has not acquired that floral addition that is so markedly Chou. Figures 16 and 4 exemplify well the decadent, static, distorted quality of the Chou and the alive, vigorous, plastic rendering of the Yin bovine *t'aot'ie*. The mask *t'aot'ie* appears in Figures 15 and 9. The Chou type is stylized and on the point of disintegration; the Yin type is rugged and primitive in appearance. Figures 6 and 13 both appear as neck belt ornament. The Yin *t'aot'ie* still has its body attached to the head and represents an energetic dragon, while in the Chou *t'aot'ie* the body has deteriorated into meaningless ornament at the side of the head, and the elements of the face are rendered in a static way. Figures 8 and 19 are both dissolved *t'aot'ies* that can be described as eyes in the midst of spirals. In the latter, however, the spiral pattern, which has a floral, elegant quality about it, is almost lost amidst the confusion of the background. In the Yin *t'aot'ie*, on the other hand, the ornament consists of incised lines, simply rendered. Here again, in these two *t'aot'ies*, we see the simple contrast of the Yin and Chou era. The same is true of Figures 7 and 18. The Yin dissolved *t'aot'ie* is restless, full of movement, with lines softly, delicately rendered. The Chou *t'aot'ie* is static, with stiff wiry lines. We thus find the Yin and Chou *t'aot'ies* falling into two individual types: the latter of a decadent, static, floral character; the former vigorous, forceful, at times primitive.

AN ANALYSIS OF THE DISSOLVED *T'AOTIE*

Returning to Karlgren's first point, the evolution of the *t'aot'ie* into the dissolved *t'aot'ie*, we find that both Karlgren and Loehr believe that the dissolved *t'aot'ie* is a dissolution of

the original *t'aot'ie*. They differ in that Karlgren believes that all dissolved *t'aot'ies* succeeded the bodied, mask, and bovine *t'aot'ies*; whereas Loehr believes that a certain "dissolved" variety, wherein the eye is the only plastic element and movement can be seen in the *t'aot'ie* face (which eventually became static), came before the bodied, mask, and bovine types.

I have investigated the number of dissolved *t'aot'ies* appearing on the different types of vessels (see Table 6). If later *t'aot'ies* are a dissolution of the earlier ones, as Karlgren maintains, we should expect dissolved *t'aot'ies* to appear on later vessels, since such *t'aot'ies* are a dissolution of earlier ones. Strangely enough, upon investigation, I found that seventy-eight vessels of the Li-ting type have realistic *t'aot'ies* on their belly, while *none* have dissolved *t'aot'ies*. The same can be said of the Yu type, of which thirty-two have realistic *t'aot'ies*; the earless Kuei, of which eight have realistic *t'aot'ies*; the Lei, of which ten have realistic *t'aot'ies*; and lastly, the Yi, of which eighteen have realistic *t'aot'ies*. *Not one* of these vessel types has a dissolved *t'aot'ie*. The vessel type Kuei, of which thirty-three vessels have realistic *t'aot'ies*, has only one dissolved *t'aot'ie*, and it is not actually a dissolved *t'aot'ie* but an animal triple band placed upon the belly of the vessel. Karlgren says of the ornament on this vessel: "The dissolved *t'aot'ie* here clearly shows the origin of the animal triple band."²⁰ The Ting type, twenty-five of which have realistic *t'aot'ies*, has only one vessel with a dissolved *t'aot'ie*. The shouldered Tsun, of which fourteen have realistic *t'aot'ies*, claims but one dissolved *t'aot'ie*. The Tsun type, with sixty-six vessels having realistic *t'aot'ies*, has four vessels with dissolved *t'aot'ies*. A glance at these dissolved *t'aot'ies* will show that actually they are animal triple bands placed upon the belly of the vessel. Karlgren says of one that it "might equally well be called animal triple band";²¹ and of another that it is "on the point of becoming an animal triple band."²²

What vessels do carry the dissolved *t'aot'ies*? They are the Ku and Tsüe, which together have eighty-two vessels with dissolved *t'aot'ies* and one hundred and eighteen that are either bodied or mask *t'aot'ies*. Turning to Table 6, we may note that the Ku has seventeen Yin inscriptions and *no* Chou, while the Tsüe has twenty-six Yin inscriptions and *one* Chou, the latter appearing with an animal triple band. What may be the significance of the fact that almost all the dissolved *t'aot'ies* appear only on two types of vessels? I shall attempt to show the reason for this phenomenon below.

EVALUATION OF INSCRIPTIONS

Turning now to Karlgren's second point, the greater number of Chou inscriptions found on *B* type vessels than on *A* type vessels, an examination of Table 4 shows that certain *B* elements are not so frequently associated with Chou inscriptions as one might suppose from the following statement:

Chou-inscribed material, limited though it is and therefore of course not very conclusive, suggests a much stronger representation of the *B* style than of the *A* style—a fact which tallies well with our conclusion that the *B* style is a later competitor, which gained ground at the cost of the Primary *A* style.²³

Here, as in the material we have just reviewed, we find that the statement is true if we limit ourselves to certain *B* elements, but it is not true if every element in the *B* style is considered. An examination of the Table indicates that compound lozenges, circle band, and

20. *Loc. cit.*, p. 33.
21. *Ibid.*, p. 49.

22. *Ibid.*, p. 50.
23. *Ibid.*, p. 93.

eyed spiral band have no Chou inscriptions. Compound lozenges and spikes, and interlocked T's each have but one. Of the total number of vessels having eyed band with diagonals, square with crescents, and dissolved *t'aot'ies* on their surfaces, a preponderant number have Yin inscriptions rather than Chou inscriptions.²⁴ When we consider the animal triple band and the de-tailed bird, we find the opposite is true. Of the forty-one vessels with de-tailed birds, but three have Yin inscriptions, whereas thirteen have Chou inscriptions which marks it immediately as a Chou element. Of the 209 vessels with animal triple band on their surface, twelve vessels have Chou inscriptions, while twenty-eight vessels have Yin inscriptions. This is good evidence that the animal triple band must have had a long existence, but the inscriptions tell us no more than this. I therefore conclude that the inscriptions do not prove (except for certain types like de-tailed birds) that *A* elements came before the *B* elements, for we find upon investigation that such an acceptable *A* element as the bodied *t'aot'ie* is associated with seven Chou inscriptions. Similarly, the uni-décor element, which Karlgren maintains to be contained only on the earliest of Yin vessels, appears with Chou inscriptions on four vessels. It appears, therefore, that the only value inscriptions have for us is to indicate the length of life of the various ornaments,²⁵ as well as the length of life of the various types of vessel on which these ornaments appear. We note on Table 6 the number of Chou inscriptions each type has, as compared to their Yin inscriptions. Immediately we can infer that such a type as the Kuei or the Square Ting with their many Chou inscriptions surely lived longer into the Chou era than did the Li-ting type with nineteen Yin inscriptions and only two Chou.

THE DURATION OF TYPES

In describing the *t'aot'ies*, we observed which type bore the Chou inscriptions and which the Yin. Let us now investigate what type of *t'aot'ies* occur on different types of vessels.

Beginning with the Square Ting, we immediately observe that there are present on this type Chou *t'aot'ies* of the decadent, floral character we have seen in Figures 10 and 12. We can then assume (since we also know that the Square Ting claims seven Chou inscriptions) that this type of vessel lived into the Chou era. We also observe that it has other *t'aot'ies* which we have just described as the vigorous, forceful Yin type. We can then assume that it extended into the Yin dynasty, but we can have no idea how far. We know, however, that this type carries no dissolved *t'aot'ies*. On Table 5, I have constructed a chart on which we may place our Square Ting type of vessel. The line on the graph occupies all of the Chou and most of the mature Yin period.

With the Li-ting we encounter a different state of affairs. We find, looking at Table 6, that this type of vessel has nineteen Yin inscriptions and two Chou. Observing the kinds of *t'aot'ies* appearing on the Li-ting, we find the somewhat decadent, overripe type exemplified in Figures 11 and 17. We may say then that this type persisted into the Chou era, but not for such a lengthy period as did the Square Ting, for we do not observe on the Li-ting that formal floral quality that characterizes later Chou ornament. We will therefore draw the line on our chart to extend not quite so far into the Chou era as does the line represent-

24. Even such a *C* element as the beaked dragon contained on 145 vessels has no Chou inscription and 22 Yin inscriptions.

25. The ornament, dragonized *t'aot'ie*, has but one Chou inscription and eleven Yin. The *t'aot'ie* bearing the Chou inscription could as well be called an animal triple band as a dragonized *t'aot'ie* (see Fig. 20). We can then presume

the dragonized *t'aot'ie* came early in the development of the *t'aot'ies*, which accords well with my belief that the dragonized *t'aot'ie* was one of the earliest *t'aot'ies* whose body eventually became detached from its head to form the vertical dragon, though the dragonized type continues to exist at the same time.

ing the Square Ting. We find that the Li-ting carries *t'aot'ies* of the forceful, mature type that bear the Yin inscriptions (Figures 3, 4, and 5). We can then extend this type almost as far back in the Yin era as we have placed the Square Ting. However, the Li-ting bronzes have one additional *t'aot'ie* not recorded on the Square Ting: the bovine type; consequently, we will extend our line on the chart to include this type. We know from the evidence on the lower half of the Hien steamer, however, that every variety of very forceful and completely distorted bovine *t'aot'ie* appears on that type of vessel which we also know extended far into the Chou period; consequently we may consider the bovine *t'aot'ie* not only to have existed in the mature Yin period but to have continued into the Chou. That this is a correct inference may be observed in Figure 21, which is a bovine *t'aot'ie* with a Chou inscription.

The Ting is an interesting type of vessel in that it chiefly carries bodied *t'aot'ies* on its principal surfaces. These, as we will observe on looking at our Chou inscribed *t'aot'ies*, lived into the Chou era, for they have the same decadent, overripe character which may always distinguish the Chou type *t'aot'ie* from the Yin type. We can therefore place the Ting type, which has ten Chou inscriptions, on our chart as having persisted about the same length of time into the Chou era as did the Square Ting. We noted that the mature bodied *t'aot'ie* was prevalent in the flourishing late Yin era, so we may extend our line on the chart to that point. However, the Ting claims one dissolved *t'aot'ie*.²⁶ This is incised with rather coarse lines forming a type of face, either rudimentary or dissolved, depending on one's point of view. I merely want to call attention to the fact that it is unlike those dissolved *t'aot'ies* that I have drawn in Figures 18 and 19.

We may for the moment conveniently class this as a dissolved type, but one that has not appeared on our vessel types before. Since it has not appeared in the Chou or Yin eras, we might extend our line either way—further into the Chou era or closer to the beginnings of the Yin dynasty. In view of the evidence I am about to present, I shall extend it in the latter direction.

Investigation of the Kuei type of vessel shows that all the types of plastic *t'aot'ies* are represented, including the efflorescent Chou type which is attested by the fifteen Chou inscriptions that the type claims. Here also we find one *t'aot'ie* of the dissolved type.²⁷ This should not be placed in the period of dissolution of the plastic *t'aot'ie*, where Karlgren places it, but, since it has a Yin inscription, somewhere in the Yin period.

Karlgren lists one hundred and eighteen vessels belonging to the Ku type, of which seventeen have Yin inscriptions and *none* Chou. In the same manner he lists one hundred and ninety-eight types of Tsüe vessels, of which twenty-six have Yin inscriptions and *one* a Chou inscription. We may note further that the Ku and Tsüe have practically all the dissolved *t'aot'ies*, twenty-six and fifty-six respectively. With only three exceptions they have all the deformed *t'aot'ies*, twenty and seventeen respectively. These deformed *t'aot'ies*, incidentally, also have *no* Chou inscriptions. What is the explanation of this interesting phenomenon? I believe the answer is that the Ku and Tsüe were the earliest types of vessels to be cast at the beginning of the Yin culture. This opinion has been suggested by both Max Loehr²⁸ and Sueji Umehara.²⁹ To substantiate this opinion we find that, according to G. D. Wu, both the Ku and Tsüe or their prototypes were already in existence in the Neolithic period in China. In speaking of the Ku (*tou*) he says: "the *li* and *tou* were found [at Ch'êng Tzü Yai in Shantung province] only in the upper layer while the proto-

26. Karlgren, "New Studies," pl. XXX, 100.

27. *Ibid.*, pl. XXXIX, 374.

28. "Beiträge zur Chronologie," p. 6.

29. "Über die Bronzezeit in China," *Ostasiatische Zeitschrift*, 1936, pp. 220-243.

type of the *tou* (Fig. XXXIV, 14) was found in the lower layer."³⁰ Elsewhere he says: "The evidence of stratification made it clear that the Black Pottery culture [lower layer] was earlier than the Shang-Yin."³¹ Of the Tsüe, Mr. Wu says: "These shapes (Fig. XXXIV, 27, 28) are very much akin to bronze shapes. That means to say they are either the forerunners or the descendants of the Bronze Age."³² We may then add the Neolithic period to our chart and extend the Ku and Tsüe types of vessel into that period.

Certain of the dissolved *t'aot'ies* we find upon the Tsüe and Ku cannot actually be called dissolved, but may be considered the first creations of the Yin artist. It is this type of *t'aot'ie* I wish to describe below.

DISSOLVED *T'AOT'IES*

O. Karlbeck describes very well two types of *t'aot'ie* which may be called the earliest bronze ornament. Of one he says: "The spirals vary considerably in shape. Some are rectangular with either pointed or rounded corners, others are oval-shaped, and others again long and narrow. On most of the fragments they form independent patterns and are in no way related to the eye. It would therefore seem as if this particular pattern cannot be interpreted as a highly stylized *t'ao t'ieh* mask."³³ Loehr in his article has described this same type of *t'aot'ie* as "an eye amidst a maze of spirals."³⁴ The second type of early *t'aot'ie* has been described by Karlbeck as follows: "The eye, which dominates the design, is of a peculiar shape and only bears a very faint resemblance to an eye. . . . It does, however, resemble the head of a bird of prey in a remarkable degree, notably that of the eagle and the vulture, and would, viewed as an isolated ornament, probably be regarded as representing such a head."³⁵ He describes two types of eyes. In one "the inner canthus is not so pronounced": . "The other eye is most unnatural, with the inner canthus designed as a hook-shaped beak . . . the resemblance to a bird's head is most marked": . He goes on to infer that there may be a connection between the bird's head and the original form of the vessel. Dr. Yetts says of the Chüeh (Tsüe): "According to the *Shuo wén* it is a pictogram of a bird, and the vessel it denotes is fashioned in bird form because a bird's twittering notes resemble the words *chieh-chieh tsu-tsü*, 'sparingly-sparingly enough-enough' —an exhortation to temperance. . . . The crest persists as the capped uprights of the cup, the eye as its handle, and the beak as its feet":³⁶ . Karlbeck goes on to show that what he classes as a bird's head was actually meant to represent this, not an eye; and he cites further examples of the development of this "bird's head"³⁷ which lead in turn to the creation of such *t'aot'ies* as are illustrated in Figures 7 and 8, and eventually into the Chou types of Figures 18 and 19, an evolution which is not difficult to understand. But let us examine this bird's head. Karlbeck says: "It [the vessel fragment] is embellished with a design, the main motif of which consists of a pair of bird's heads placed heraldically on either side of a ridge. Behind the head follows a horizontal band of *lei wén* of the same height as the head. Above this band there are a number of parallel uprights leaning away from the central ridge. Extending downwards from the junction between the head and the

30. *Prehistoric Pottery in China*, London, 1938, p. 65.

31. *Ibid.*, p. 13.

32. *Ibid.*, pp. 61-62.

33. "Anyang Moulds," *Bulletin of the Museum of Far Eastern Antiquities*, VII, 1935, p. 51 (for an illustration of this type, see Karlgren, "New Studies," pl. LIII, 1067).

34. *Loc. cit.*, p. 16 (free translation).

35. "Notes on the Archaeology of China," *Bulletin of the Museum of Far Eastern Antiquities*, II, 1930, p. 195 (for an

illustration of this type, see Karlgren, "New Studies," pl. LV, 1192).

36. *Ibid.*, p. 196.

37. *The George Eumorfopoulos Collection; Catalogue of the Chinese and Corean Bronzes, Sculpture, Jades, Jewellery and Miscellaneous Objects*, Vol. I, London, 1929, 1930, p. 23.

38. *The Eumorfopoulos Collection*, Vol. I, pl. VII, and *Sumitomo Catalogue*, Vol. II, No. 54.

lei wén are a number of parallel S-curves. The rest of the surface is filled by rounded spirals."³⁹ This type of bird's head develops until we have the splended bird-dragon seen on a Hu vessel reproduced by Karlgren⁴⁰ where, though we have still all the elements of the original bird's head present, this has been embellished and elongated. From this early type which is in the process of becoming, to the more stylized form which lacks the originality of the earlier ornament, is but a step in the evolution of style.

A place for the dissolved *t'aot'ies* must be found somewhere on our chart. We already know what style existed in the mature Yin period and we know what form it took in the Chou period. We found only two Chou inscribed dissolved *t'aot'ies* in Table 4. These are actually dissolved types, not at all like those we have just described. Where, then, are we to place the eighty-two dissolved *t'aot'ies* that appear on the Tsüe and the Ku? We might, as Karlgren does, place them after the mature Yin type, but we have already seen the overripe, floral type into which the mature Yin developed. We have also seen that the Ku and Tsüe *t'aot'ies* have no Chou inscriptions, as would be expected had they followed the forceful plastic Yin type. If Karlgren were correct in thinking that the mature *t'aot'ie* eventually dissolves, we should expect to find dissolved *t'aot'ies* appearing on those types of vessels that have the plastic, mature *t'aot'ies*; but we do not. We could place them as having been created at about the same time as our mature *t'aot'ie*, but a glance at certain of these dissolved types will dissuade us from such a belief; for instance, a *t'aot'ie* as exemplified in Sumitomo's Catalogue,⁴¹ is an utterly different expression of art from one illustrated by Karlgren.⁴² It appears that we have no choice other than to place the dissolved type that Karlbeck has described between the Neolithic and Mature period. That some forms of dissolved *t'aot'ies* were made in the mature Yin period can be exemplified by a Tsun and a Ku example reproduced by Karlgren.⁴³ They were the direct ancestors of the Chou dissolved *t'aot'ie* shown by my Figure 18.⁴⁴

In other words, could not the types of vessels have played a part in the development of the *t'aot'ies*? The fact that we find the Ku and Tsüe shaped vessels or their prototypes in the Neolithic period, and that most of the dissolved *t'aot'ies* appear on these two types of vessels and have no Chou inscriptions, should confirm our belief that certain dissolved *t'aot'ies* are not "dissolved" but are the first striving of the Yin artist toward plastic expression.

MENOMINEE, MICHIGAN

39. "Notes on the Archaeology of China," p. 197.

40. "New Studies," pl. XLVIII, 628.

41. No. 11, 54.

42. "New Studies," Pl. IX, 214.

43. *Loc. cit.*, pl. XLVIII, 72c; pl. XXII, 835.

44. In *B.M.F.E.A.*, VIII, p. 35, Karlgren analyses the inscription on this vessel and dates it Western Chou. In *B.M.F.E.A.*, IX, p. 67, he dates it Yin. I think the former correct.

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TABLE I

TABLE 2
CORRELATION OF A, B, AND C ELEMENTS WITH IMPORTANT
B AND C ELEMENTS

Interlocked T's	Dragonized T ^{aotie}	Dis-solved T ^{aotie}	Comp. Loz. & Spikes	Prin. Surf. Bare	Ver-tical Ribs
Animal Triple Band	6	..	6	5	139
Eyed Band w. Diagonals . . . . .	..	..	..	39	6
De-tailed Bird	1	..	..	..	..
Rising Blades	1	7	11	1	40
Beaked Dragon	2	..	..	13	2
Trunked Dragons . . . . .	..	4	..	1	17
Spiral Band	6	3	30	4	47
Winged Dragon	1	2	1	..	11
Jawed Dragon	2	..	..	1	2
Deformed Dragon	3	4	..	3	14
Dragonized T ^{aotie}	2	2	2	5	17
Alt. Turn. & Whorl C. . . . .	..	..	..	5	10
Birds . . . . .	..	..	..	2	15
Snakes . . . . .	..	..	5	5	15
Spikes	2	..	..	..	12
Turning Dragons . . . . .	..	3	1	4	13
Alt. Trunked & Whorl . . . . .	..	..	..	5	1
Alt. Sq. w. Cres. & Whorl . . . . .	..	..	..	5	..
S Dragon . . . . .	..	..	..	..	9
Alt. Birds & Whorls . . . . .	..	..	2	..	10
Whorl Circle . . . . .	..	1	..	..	10
Feathered Dragon . . . . .	..	..	..	1	1
Compound Lozenges . . . . .	..	1	1	..	8
Eyed Spiral Band . . . . .	..	2	2	22	..
Circle Band	2	6	9	7	7
Square with Crescent . . . . .	..	..	1	..	59
N.B. Bodied T ^{aotie} . . . . .	..	1	..	2	..
Cicada . . . . .	..	..	..	..	3

TABLE 3
RELATIONSHIP OF A, B, AND C ELEMENTS WITH T-SPIES

	T ^{aotie}	Bodied	Mask	Bovine
Rising Blades	91	35	11	1
Beaked Dragons	7	74	10	1
Trunked Dragons	36	30	8	1
Spiral Band	0	10	40	2
Winged Dragons	2	15	7	2
Jawed Dragons	1	17	3	0
Deformed Dragons	2	14	5	0
Dragonized T ^{aotie}	0	13	2	1
N.B. Bodied T ^{aotie}	0	10	2	2
Alt. Turn. Drag. & Whorls	0	8	2	0
Belt-Masked T ^{aotie}	0	7	5	2
Birds	3	10	11	0
Snakes	43	10	0	2
Cicadas	9	1	3	0
Turning Dragons	2	2	4	1
Hanging Blades	0	6	1	0
Alt. Turn. & Jawed	0	1	0	0
Whorl Circle	0	2	0	0
Feathered Dragon	0	3	0	0
S Dragon	0	1	0	1
Snakes and Bosses	0	1	0	1
Circle Band	0	3	1	2
Sq. with Crescents	0	1	0	0
Interlocked T's	0	1	0	0
De-tailed Birds	0	1	0	2
Eyed Band with Diagonals	0	0	0	1
Animal Triple Band	0	0	1	22
Vertical Dragons	6	54	79	5
Uni-Décor	0	36	24	3
Flanking Turning Dragon	0	11	1	1
Alt. Cicadas & Whorls	0	0	3	0

TABLE 4
YIN AND CHOU INSCRIPTIONS

	No. of Ves. with Yin Inscriptions	No. of Ves. with Chou Inscriptions	Total No. of Ves.
<i>A ELEMENTS</i>			
Bodiced <i>Taotie</i>	32	7	217
Masked <i>Taotie</i>	23	3	132
Bovine <i>Taotie</i>	1	0	16
<i>Taotie</i>	24	0	127
Uni-Décor.....	8	4	70
Vertical Dragon.....	18	3	144
Cicadas.....	1	0	27
<i>B ELEMENTS</i>			
Animal Triple Band.....	28	12	209
De-tailed Bird.....	3	13	41
Compound Lozenges.....	8	0	30
Spikes.....	3	5	19
Compound Lozenges and Spikes.....	6	1	36
Eyed Band with Diagonals.....	7	3	48
Circle Band.....	16	0	110
Eyed Spiral Band.....	3	0	23
Square with Crescents.....	5	2	29
Interlocked 'T's.....	1	1	16
Dissolved <i>Taotie</i>	14	2	113
Vertical Ribs.....	4	3	39
<i>C ELEMENTS</i>			
Deformed <i>Taotie</i>	3	0	40
Beaked Dragons.....	22	0	147
Birds.....	9	6	77
Snakes.....	14	4	87
Jawed Dragons.....	3	1	40
Trunked Dragons.....	13	1	106
Hanging Blades.....	4	0	36
Rising Blades.....	28	2	207
Dragonized <i>Taotie</i>	11	1	73
Turning Dragon.....	6	2	80
Whorl Circle.....	6	5	83
Spiral Band.....	20	1	168
Winged Dragon.....	10	1	54
Feathered Dragon.....	2	2	13
S Dragon	0	3	14
Deformed Dragon.....	4	1	50
Principal Surface Bare.....	55	36	424

TABLE 5
CHRONOLOGICAL CHART

CHOU	YIN	EARLY YIN	NEOLITHIC
EFFLORESCENT	MATURE,	LOW RELIEF	
DECADENT	MASK, BODIED, BOVINE	DISSOLVED	
Square Ting			
Li-Ting			
Ting			
Kuei			
Ku			
Tsüe			
P'ou			

TABLE 6

LETTERS TO THE EDITOR

A letter from Dr. Hanns Swarzenski calls our attention to the fact that Dr. Ernst Kitzinger has kindly informed him that the author of the review in the *Burlington Magazine*, LXXV, 1939, pp. 87 ff., signed O. K., whom Dr. Swarzenski, in the *ART BULLETIN*, XXIV, 1942, p. 297, erroneously identified as Dr. Kitzinger, is actually Dr. O. Kurz. *Ed.*

Sir:

Mr. J. J. Sweeney's review of recent periodical literature on modern art in the December issue of the *ART BULLETIN* brings to light many articles that might otherwise have escaped the students of this period. Most of the material is handled with a critical discrimination that is equally valuable, but I should like to disagree with the comment allotted to Dr. Robert Goldwater's article: "Some Aspects of the Development of Seurat's Style" (*ART BULLETIN*, XXII, pp. 118-130), which Mr. Sweeney dismissed as offering "a careful and exhaustive consideration of the published literature on Seurat, ending on a note which would have been extremely interesting if further developed: the basic relationship between Seurat and Art Nouveau...." This judgment, in my opinion, is neither adequate nor accurate.

Goldwater's review of the published literature hardly rises above the level of the footnotes and it is not exactly exhaustive. What is important in this article is the attempt to interpret the development of Seurat's style during his last five years (1886-1891), that is, in paintings, from the *Poseuses* to the *Parade* to the *Chahut* and the *Cirque*. The method is an analysis of these paintings in relation to the known preparatory sketches, to other works of the painter and finally to the style of Seurat's contemporaries. Everyone is aware of the increasing shallowness of space and the subsequent emphasis upon surface in these paintings, but Goldwater is the first, so far as I know, to publish a careful analysis of this development as it is observed in Seurat's own process of selection, the changes in the preparatory sketches. This method is a testimony to the excellence of D. C. Rich's analysis of the *Grand-Jatte* (*Seurat and the Evolution of "La Grand-Jatte,"* Chicago, University Press, 1935) which serves Goldwater as a point of departure. If the interpretation of the *Poseuses* is briefer than Rich's exhaustive study of the Chicago picture, this need not be taken as a criticism of the article. The fact is that Seurat made fewer sketches for the later pictures as he became more certain of the solution of his problem. The problem is no less complex, however, for the observer, and for this reason Goldwater's analyses are important. The final study for the *Poseuses* he sees as "one which emphasizes the organisation of the picture surface into flat, bounded areas, areas whose spatial relationship is given, not by intervals realised as spatial and atmospheric volumes as in the *Grand-Jatte*... but by linear overlappings whose representation omits atmospheric perspective and greatly reduces the volume of the figure." These characteristics of surface design and "spatial compression" are exhibited more emphatically in the *Parade*, the *Chahut* and the

Cirque and they represent the new stage of Seurat's style.

It is well known that Seurat worked out a theory for the symbolic expression of mood in terms of tone and color relationships by means of his divisionism, but it is less well-known that this theory included linear relationships and that the use of verticals, horizontals, curves, and angles was intended to convey some symbolical meaning. Goldwater shows that it was the development and application of this theory which accounted for the stylistic change. Seurat was not alone in his search for an artistic theory. Gauguin and Émile Bernard were speculating about "synthetism," Van Gogh claimed he found an emotional meaning in pure color and line, Maurice Denis defined the aims of the "symbolists." These theorists of Seurat's generation all had something in common: "... they were trying to find a wider basis for their art than the 'nature seen through a temperament' that was the conscious theoretical justification of the impressionists." And the analogy was not limited to theory. Seurat's outlines "irregular yet continuous, broken yet flowing, used to pick up and repeat the rhythm of the figures, decorative rather than massive in effect, employed to bind horizontal and vertical planes together, may be found in the work of other men of the time." As examples, Goldwater cites Grasset, Bonnard, Toulouse-Lautrec, and especially Gauguin. Singularly enough, all of these artists were interested in posters, crafts or interior decoration in addition to their easel painting, and Seurat is seen to share this interest in his design for the book jacket for the novel, *L'homme à femmes*.

What is the meaning of these contemporary trends to which Seurat and so many other leading French artists of the time are related? Together they shared a common background, the reaction against Impressionism; a common program, the establishment of an omnipotent artistic theory; a common style, the flattening of space, linearization, and consciousness of pattern apart from the objects involved; a common interest in the application of their painting style to the decorative arts. The fundamental point of Goldwater's article is that this general trend between 1886 and 1891 was the beginning of the *art nouveau* movement and functioning long before it had been given its name (after the opening of S. Bing's *Maison de L'Art Nouveau* in Paris, December 1895). In other words, Goldwater implies that long before Van de Velde, Horta, and the Belgian movement there was a fermentation of ideas and a stylistic trend bearing features of unmistakable similarity to *Art Nouveau*. It cannot be denied that the discovery of serious artistic parenthood for a movement long considered as the lunatic fringe of nineteenth-century historicism is extremely interesting, but a careful reading of Goldwater's article will reveal, not that it ends on this note, as Mr. Sweeney claims, but that this is its *raison d'être*.

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BOOKS REVIEWS

CHARLES RUFUS MOREY, *Early Christian Art. An Outline of the Evolution of Style and Iconography in Sculpture and Painting from Antiquity to the Eighth Century*, Princeton, Princeton University Press, 1942. Pp. ix+282; 70 plates with 211 (210) figs. \$7.50.

The publication of Professor Morey's book on *Early Christian Art* is an event of major importance to all students of art. The result of a lifetime devoted to mediaeval studies, it brings together and amplifies the views previously presented by the author and provides us with a most comprehensive study of Early Christian sculpture and painting.

The antecedents of Christian art in the Hellenistic and Classical periods are examined in the three opening chapters, the first of which is devoted to a general consideration of classical style. Style is defined as the "imprint on a work of art of a point of view" (p. 4), and the Greek point of view is characterized by the interest in the universal and, hence, an aversion to any indication of locality and time. In art this attitude finds its expression in the use of neutral backgrounds, central compositions, and limitation of action to one plane. The changes introduced by the fourth-century masters lead to the experiments of the Hellenistic period. The exaggerations of the Pergamene and allied schools bring about a reaction in Athens and in the conservative centers of Asia Minor, which results in a return to the classical forms of the past. However, in the new centers, such as Alexandria, which were less bound by old tradition, other tendencies appear; we have thus two main currents: the conservative Neo-Attic and the progressive "Alexandrian."

The Neo-Attic style reaches its height in the first centuries B.C. and A.D., and is best represented by the academic statuary of the school of Pasiteles. In reliefs the Hellenistic interest in environment appears in the Telephus frieze at Pergamum, where we discern for the first time the notion of a continuum of time, spatial effects, and continuous landscape background. But this and similar attempts remain without sequel. Figures are once again placed before a neutral background; even when trees, rocks, and buildings are introduced, as in the so-called pictorial reliefs, the composition never extends into space, and movement is in a plane parallel to the background. The Attic and especially the Asiatic sarcophagi, dating from the middle of the second to the fifth century after Christ, display an increasing interest in rhythmic sequence; the relief is flattened and color contrasts replace plastic form. The Antioch mosaics of the first two centuries and some of the later examples are executed in the "Alexandrian" manner, giving an illusion of space but, gradually, a return to the Neo-Attic tradition may be observed. Persian influence is also responsible for the disappearance of plastic form, and the loss of unity in the composition of these mosaics.

The "Alexandrian" style contrasts with the Neo-Attic in its recognition of spatial depth, its interest in light effects, and its use of impressionistic technique. The literary evidence which points to Alexandria as the source and center of this style is examined and important examples from Pompeii, Hercu-

laneum, and Rome are studied. The descriptions of Philostratus and the miniatures of the Vatican Vergil testify to the survival of impressionism down to the time when mediaeval book illustration begins.

Chapter iv is devoted to "The Beginnings of Christian Art." The iconography of the third-century paintings in the catacombs of Rome offers evidence of affiliation with Alexandria; their style shows the corruption of "Alexandrian" naturalism and impressionism. Both style and iconography of the Latin frieze sarcophagi of the fourth century seem to be derived from the illustrations of the Septuagint. The early date and the "Alexandrian" style of this Old Testament cycle may be surmised from the miniatures of two later copies: the Joshua Rotulus, in the Vatican Library, and the Psalter from the Bibliothèque Nationale, Ms. Gr. 139. The "Alexandrian" manner of Old Testament illustration is further evidenced by the charred fragments of the Cotton Genesis, a sixth-century manuscript probably executed in Alexandria. The strength of this tradition is made clear by its survival in the Vienna Genesis, which in the late fifth or early sixth century was copied in Asia Minor from some "Alexandrian" model.

The survival in Christian Egypt of the ancient "Alexandrian" style is traced in Chapter v through a study of the paintings in the catacombs of Karmuz, and of the ivories assigned to Alexandria primarily on the basis of their iconography. To these are added the Cotton Genesis and the Vatican copy of the Christian Topography of Cosmas Indicopleustes, the latter being a better iconographic than stylistic guide to the art of Alexandria. Coptic art marks the greatest contrast with the Hellenistic art of the Delta; it is characterized by the conventionalization of natural forms coupled with a shift to primitive techniques. The earliest stages of this transformation appear in the bone carvings found in the Delta and in the frescoes at El Bagawat. Its culmination may be seen in the paintings from Bawit and Saqqara where Hellenistic forms have completely disintegrated.

Chapter vi deals with "Christian Art in the Asiatic East" and includes works from Constantinople and Salonica as well as from Asia Minor, Syria, and Palestine. Antioch was probably "the breeding ground of what can be called the 'Syro-Palestinian' factor in Asiatic Christian style and iconography" (p. 103). The art of Constantinople was, for an enduring period, eclectic and exotic; thus the miniatures of the Dioscurides manuscript, copied in the early sixth century for Juliana Anicia, are derived from "Alexandrian" and Neo-Attic examples. But of the two traditions the latter was the more important. This is shown by such examples as the marble pulpit from Salonica, the sarcophagus with the figures of Christ and the Apostles from Psamatia, now in Berlin (K. F. M., no. 26) and other works which are attributed to Constantinople. The Rossano Gospel executed in Asia Minor, the earliest surviving illustrated Greek New Testament, and the related fragment from Sinope show the change from the Neo-Attic to the Asiatic style; the figures are further flattened, their frontality and their isolation are more

strongly emphasized. The same tendencies appear in Syrian works, such as the Rabula Gospel.

Chapters VII and VIII are devoted to the study of Christian Art in the West, primarily in Italy. The earlier tradition of church decoration survives in the fourth and fifth-century mosaics, especially in the Old Testament series at S. Maria Maggiore, which was probably copied from some illustrated codex of the Septuagint. But the decadent Latin style is soon replaced by the Greco-Asiatic, through the influence of oriental models and ideas. The principal center for the diffusion of these notions in Italy was Ravenna. The author shows that Byzantine style is announced but not realized by the mosaics of this city and that the art they represent is an orientalized Latin style.

In the last chapter, entitled "The End of Early Christian Art," Professor Morey first examines the provincial examples from Gaul and North Africa and the later churches of Italy. That the oriental influence is kept alive in Rome through the settlements of Asiatic monks is shown by the paintings of S. Saba. At S. Maria Antiqua, however, the Asiatic manner which had dominated the whole of the sixth century is interrupted shortly before A.D. 650 by paintings in the "Alexandrian" tradition. The sudden intrusion of this alien style suggests the arrival of foreign artists, probably Alexandrians, who had fled before the Arab conquest. In the first half of the eighth century the foreign infusion loses its force and the Asiatic style is restored. The effects of the dispersion of Alexandrian artists are next studied within the Byzantine empire. The author sees the work of these exiles in some of the nave mosaics of St. Demetrios at Salonica and he assigns the entire group to the seventh century instead of to the sixth, when they have usually been dated. He also dates in the seventh century, rather than the fifth, the apse mosaic of Hosios David at Salonica, with the representation of the Vision of Ezekiel. The same dispersion of Alexandrian artists is responsible for the Joshua Rotulus and the Paris Psalter, copied in Constantinople; the arguments for dating these manuscripts about A.D. 700 are briefly stated.

The above summary of the salient points of each chapter can give but a feeble idea of the number of problems examined and the original views submitted by the author. In tracing the artistic development of a period for which there are few monumental examples, conclusions have to be reached mostly with the help of works of minor art, the origin and date of which are not known with certainty. Furthermore, since even these works of minor art are comparatively rare, chance survivals may tend to acquire undue significance in our eyes and thus color our opinions. This explains, in part, the varied theories which have been advanced concerning the origin and development of Christian art and the relative importance of the different centers of the Christian world. It has been one of the principal aims of Professor Morey and his school to study these examples of minor art, to group and assign them to definite localities. But the difficulties inherent in the subject leave the door open for many hypotheses, and one may, with due respect for the scholarship of Professor

Morey and for his important contributions to the knowledge of Christian art, disagree with some of his general conclusions.

If we confine ourselves to the Christian East, we get the following general picture. The Neo-Attic style spreads in Asia Minor, Syria, and Palestine and is gradually transformed into the Asiatic style under the impact of the East; the "Alexandrian" style rules in Alexandria; in the eclectic art of Constantinople the Neo-Attic tradition is preponderant and this style is soon transformed into the Asiatic. These are the main points I should like to discuss. In my opinion this localization of the different styles presents too rigid a framework for the artistic activities of regions which had been bound to one another by many close ties ever since the conquests of Alexander and of Rome had created the unity of the Mediterranean world.

The spread of the Neo-Attic style is shown primarily through numerous examples belonging to one type of monument, namely the Asiatic sarcophagi. We do not know, however, whether the same tendencies also predominated in other works of this province, or whether, as in Antioch, painting followed the "Alexandrian" style, "proper to the newer frontiers of Hellenism in general". Fragmentary examples, like the paintings in the floral or carpet style from the House of Attalus in Pergamum, suggest that the different types of wall decoration used in other parts of the Roman world had also penetrated into Asia Minor. There is also evidence that Hellenistic themes and style did not entirely disappear in Syria and Palestine when Sassanian influence made itself felt after the third century. Such evidence is furnished by the descriptions of Nilotic and allegorical scenes at Gaza, by the mosaics with architectural landscapes at the Great Mosque of Damascus, by some of the paintings at Qusayr Amra, in particular the Zodiac ceiling, and by several other examples.

In speaking of the "Alexandrian" style, Professor Morey explains that the word is used "with quotation marks that fairly represent the uncertainty of the term. There is much that points to Alexandria as the source and center of the style; there is almost no evidence from Alexandria itself to support this indication" (p. 38). However, the quotation marks are rarely used for the Christian period, and their omission implies that there is no uncertainty as to the localization in Alexandria of the pictorial style or the Alexandrian origin of the works discussed. This implication becomes even clearer in the discussion of the specific examples, the conclusion being that the "Alexandrian" style, defeated and submerged elsewhere by the native Neo-Attic tradition, survived in the Delta until the time of the Arab conquest.

In order to accept such a conclusion we need to be assured: (1) that the imitation of Attic art which "spread throughout the Hellenistic world" after the fourth century B.C. did not penetrate into Alexandria and modify its style; (2) that Roman Alexandria was not affected by the classical revival of the Hadrianic period, or the oriental influence of the late third and fourth centuries; (3) that in the Christian period the infiltrations from the hinterland, notice-

able in Antioch, had no effect on the art of the Delta, even though Coptic sculpture and painting present the most extreme examples of an orientalized Christian Art.

Much of the art of the Delta has disappeared but, because of this, the few surviving works deserve particular attention. It is a pity that Professor Morey did not include these examples in his discussion and I should like to call attention to them. Sculpture in the round does not play an important part in Early Christian art; we need not consider therefore the portrait statues or the numerous terra-cotta figurines found in Alexandria, even though they throw an interesting light on Ptolemaic art. We may pass directly to the reliefs, paintings, and mosaics. A considerable number of sculptured stelae, found in Alexandria and the neighboring necropolises, are free from the intrusion of ancient Egyptian themes. The earliest belong to the end of the fourth century B.C. and are so close to Attic examples that Pfuhl,¹ and other scholars after him, have suggested that they might be the work of Attic masters. The work deteriorates after the second century but the style and the types follow an evolution similar to that observed in Greek and Roman stelae. The background remains neutral throughout, the figures gradually become frontal. The same remarks apply to the painted stelae of the third and second centuries B.C., found in and near Alexandria. Erected for Galatians, Macedonians, and Thracians, for soldiers who came from the Peloponnese and Asia Minor, they follow the types current in those regions. Among contemporary works, the stelae from Pagasae in Thessaly and from Sidon, in Phoenicia, offer the closest parallels to those found in the Delta. The Heliko stele,² with its interest in space, has remained so far a unique example in Alexandria and may be compared to that other exceptional example, the Hediste stele from Pagasae. The style of the stelae, both sculptured and painted, does not suggest, even remotely, the "Alexandrian"; it is an international style based primarily on earlier Attic works, and the comparisons with paintings from Pompeii and Delos further corroborate this international character. That these stelae never figured among the important artistic productions of Alexandria is obvious; that they may not be typical representatives of the dominant style is possible. They bear witness, nevertheless, that the Neo-Attic style was not unknown in the region of the Delta during the Ptolemaic and early Roman periods.

The discoveries made at Hermopolis in 1934 by the Egyptian University Excavation furnish even more interesting evidence of the spread of the Neo-Attic style in the first centuries after Christ. Hermopolis is about four hundred miles south of the Delta, but despite this distance from Alexandria the subjects painted in houses of the second century at Hermopolis are purely Greek, and the work differs only in quality from Roman and Pompeian frescoes. On some damaged walls, one can recognize the Rape of

1. E. Pfuhl, "Alexandrinische Grabreliefs," *Athenische Mitteilungen*, xxvi, 1901, pp. 258-304.

2. R. Pagenstecher, *Nekropolis. Untersuchungen über Gestalt und Entwicklung der Alexandrinischen Grabanlagen und ihrer Malereien*, Leipzig, 1919, fig. 53.

Proserpine and the Entry of the Wooden Horse into Troy; the best preserved panels depict episodes from the story of Electra and the legend of Oedipus.³ Electra is seated, mourning, by the side of Agamemnon's tomb, represented as a tholos; two nude male figures, possibly Orestes and Pylades, approach from the right. The small size of the figures in relation to that of the panel, the diagonal line followed by Orestes and Pylades contribute to a feeling of space, and the composition certainly retains something of the "Alexandrian" tradition. But the legend of Oedipus is composed in a very different manner. On the left Oedipus, standing in an arched gateway, is questioning the sphinx; next come two seated figures which represent, according to the inscriptions, the Question (ZHTHMA) and Thebes (ΘΕΒΑΙ). Oedipus slaying his father Laios is at the opposite end of the panel, facing left, and this group is accompanied by Ignorance (ΑΓΝΩΣΤΑ) fleeing. The figures occupy almost the entire height of the panel, they move in a direction parallel to the wall painted across the background. The entire composition is strongly reminiscent of the Aldobrandini nuptials and may best be described by using Professor Morey's definition of the Neo-Attic ideal: elimination of the third dimension, enlargement of the figures at the expense of their surroundings. Thus in Egypt, in the second century A.D., the "Alexandrian" and Neo-Attic styles existed side by side just as they did in Pompeii and Rome during the first centuries B.C. and A.D.

Some of the mosaics found in Alexandria and in neighboring cities of the Delta are decorated with the geometric designs current in Roman art, others with figured representations. Probably the earliest of these is a pavement mosaic from Alexandria-Chatby, dating ca. 50 B.C.-A.D. 50, which represents a mythical deer hunt.⁴ The hunters are young, winged figures, like the Pompeian or Roman putti, and take up the entire height of the panel. They are sharply outlined against the neutral background, and they move in a direction parallel to the spectator. Real and fantastic animals, confronted whenever possible, fill the wide border. A mosaic with a Nilotic scene has been discovered near Alexandria, on the site of the ancient city of Thmuis, the present Tell Tmai.⁵ A banquet scene occupies the center of the foreground; small nude figures, crocodiles, hippopotami, herons, other animals, and also large flowers are scattered over the remaining parts of the mosaic.

3. Sami Gabra, "Rapport préliminaire sur les fouilles de l'Université égyptienne à Touma (Hermopolis ouest)," *Annales du Service des Antiquités de l'Egypte*, xxxii, 1932, p. 71; *The Illustrated London News*, March 4, 1933, pp. 310-311; *Ibid.*, April 21, 1934, pp. 598-599, figs. 1, 6, and 7. To these examples may be added the paintings found at or near the temple of Pneferos, at Theadelphia in the Fayum, especially the fresco of the Dioscuri. Helen is shown between the Dioscuri, who have dismounted and stand in front of their horses. All three figures are in frontal poses and isolated from one another. See E. Breccia, *Monuments de l'Egypte Gréco-Romaine*, 1, 2, *Teadelphia e il Tempio di Pneferos*, Bergamo, 1926, pl. LXI, 1, and pp. 124-126.

4. E. Breccia, *Municipalité d'Alexandrie, Le Musée Gréco-Romain, 1925-1931*, Bergamo n.d., pl. LV; *id.*, "La mosaique de Chatby," *Bulletin de la Société d'Archéologie d'Alexandrie*, N.S. v, 1923, pp. 158-165. A similar fragment likewise found in Alexandria was published *ibid.*, N.S. II, 1907, pp. 105 f., fig. 22.

5. Breccia, *Musée Gréco-Romain*, pl. LII.

There is no unifying element in the composition, no indication of depth, and the figures, especially the men reclining at the banquet table and the dancer, are highly stylized. From Thmuis again come two other pavements each with the bust of an allegorical figure representing the city of Alexandria, in an *emblema*, surrounded by a wide geometric design.⁶ On the first, which bears the signature of an artist by the name of Sophilos, the bust, almost frontal, is delicately shaded, but the sharply outlined eyes are treated in a very unusual manner. A white rim borders the iris and gives to the eyes a strange staring expression. The facial type recalls that of XPHCIC from Antioch and, in style and technique, it is even closer to the figure of ΓΗ in the Antioch mosaic of the Earth and the Crops.⁷ On the second the modeling is very summary, the pose even more frontal, all the features sharply outlined and the eyes, with the same strange white rim around the iris, even more staring.⁸ None of these mosaics display the characteristic traits of the "Alexandrian" style, and it is particularly significant that they should be absent from the Nilotic scene which, by its subject matter, belongs to the Alexandrian tradition. On the contrary, all these examples from the Delta are Neo-Attic rather than "Alexandrian"; with the exception of the deer hunt, they show the breakdown of the Hellenistic figure style as well as the weakening of the Greek ideals of unity of time and place.

The stylization of natural forms and the degeneration of the Hellenistic style are even more apparent on a large mosaic found at Cheikh Zoueda, at some distance east of Alexandria, in one of the military outposts which guarded the coast road.⁹ Though a provincial work, it should be mentioned here, for both the subject matter and the inscriptions prove it to be the product of the Greek-speaking elements of Egypt. The latest coins found on this site belong to the reign of Constantius II (361) and, judging from the style, the mosaic cannot be earlier than this date. Three different scenes, with explanatory inscriptions in Greek, are placed one above the other. The panels illustrating the legend of Phaedra and Hippolytus and the mysteries of Dionysus are based on a fine model, but their execution is very crude. There is no understanding of the human form, or of movement; the figures are frontal and isolated from one another; there is no indication of the setting, save two conventionalized trees framing Hippolytus in the upper panel. In its departure from the Hellenic spirit, this work has gone further than any of the fifth or even sixth-century mosaics discovered at Antioch.

The surviving monuments of the Delta, those which belong to the regions of Egypt occupied by Greco-Roman colonies, do not provide us with the evidence that the "Alexandrian" style, whether it

6. *Ibid.*, p. 65 and pls. A and LIV. Another mosaic from Thmuis, representing Alphaea and Arethusa, mentioned in *Annales du Service des Antiquités de l'Égypte*, XIII, 1913, p. 184, has not been reproduced.

7. *Antioch-on-the Orontes*, II, ed. by R. Stillwell, Princeton, 1938, pl. 60, fig. 84, and pl. 23, fig. 33.

8. Breccia, *Musée Gréco-Romain*, pl. LIII, 194.

9. Jean Clédat, "Fouilles à Cheikh Zoueda (Janvier-Février, 1913)," *Annales du Service des Antiquités de l'Égypte*, XV, 1915, pp. 15 ff., pls. III-V.

originated in Alexandria or not, was predominant in this area or that it survived untouched by the currents which modified the art in other parts of the Mediterranean world. Can we discover then in the Christian works attributed to Alexandria such a strong imprint of the "Alexandrian" tradition that we may consider them as evidence of the survival of a style for which there are few, if any, early examples? The "Alexandrian" preference for a suggestion of space, the definite interest in form and freedom of movement can be seen on some fourth and fifth-century ivories, particularly on the Berlin pyxis, but these traits are no longer present in most of the works dating in the sixth and seventh centuries. They display the same stylistic changes as those which occur, in varying degrees, in other parts of the Christian world. Some of these changes have been pointed out by Professor Morey. In the Cotton Genesis "a degree of conventionality has overtaken the freely moving figures and the spacious landscape of the original style" (p. 78). The influence of Coptic art may be discerned on a number of ivories, especially in the "sketchy and flat reduction of the earlier manner" (p. 95). To these observations may be added the fact that spatial composition is absent even when required by the subject. In the representations of the games in the Hippodrome on the consular diptychs, the awkwardly moving figures are piled up on one another, following the eastern practice of inverted perspective, and it would be difficult to recognize the "Alexandrian" figure style in the stiff portraits of the consuls, executed in a flat and linear technique.

Thus the evidence furnished by the pre-Christian works found in Alexandria, and by many of the works attributed to the Christian ateliers of this city, does not bear out the statement that there was in Alexandria "a persistence of Hellenistic form in figure and drapery down to the Arab conquest which is unparalleled in any other center" (p. 83).

If we pass to Constantinople and examine more closely some of the examples which Professor Morey studies, and others which he does not mention, we can find evidence for the survival of the "Alexandrian" style besides that furnished by the Dioscurides manuscript. We can see, moreover, that the Greco-Asiatic style did not become so soon the "native style" of this region. In trying to determine the artistic tendencies of the capital, it would be preferable to omit monuments the definite origin of which is unknown, like the colonnettes of the ciborium at St. Mark's, or works which have been executed by ateliers from the interior of Asia Minor, like the Gospel at Leningrad, no. XXI. So far as I know there is no documentary evidence for the Constantinopolitan origin of the colonnettes and the fact that they were installed after 1260 does not seem sufficient reason for considering them as part of the loot from the conquest of Constantinople in 1204. At various times the Venetians had brought home objects from other cities; one need only mention the pilasters from Acre and the columns which, according to the Dialogues of the *Anonymus of Pola*, had been taken from the basilica of this city. Nor does the eclectic character of the iconography of the scenes on the colon-

nettes necessarily point to Constantinople, for eclecticism, even in iconography, was not a monopoly of the capital. As for Leningrad xxi, the connection of the Evangelist portraits with those of the tenth-century Constantinopolitan Gospel, Stavronikita 43, is an iconographic and not a stylistic one. In an earlier study Professor Morey pointed out that the portraits of these two manuscripts derived from a common archetype; but he also showed that the miniaturist of Leningrad xxi was unfamiliar with the type of architectural background used in his model, that he omitted it, or imitated it "with sorry success."¹⁰ We cannot be sure therefore that he was any more successful in reproducing the figure style and that his work is "faithfully reflective of metropolitan fashion" (p. 193).

Of the Constantinopolitan works mentioned in chapter vi, the sarcophagus of the Ottoman Museum discovered in 1933 (fig. 102) deserves special attention. It excels in quality all surviving works of the Early Christian period and its Hellenism might be less "surprising" were we better acquainted with the art of the capital. The apostles represented on the short ends of the sarcophagus remind one of the Archangel on the ivory from the British Museum, and the angels, carved in bold relief on the long sides, with their free movement and flying drapery are comparable to similar groups on the ivories attributed to Alexandria, except that the sarcophagus master displays a better understanding of the human form.

The survival of Hellenism in Constantinople is evidenced by the large mosaic pavement discovered on the site of the Sacred Palace, probably to be dated in the fifth century.¹¹ The genre scenes, depicted with great freedom, are much more in the Hellenistic tradition than contemporary mosaics from Antioch or the rare examples found in Alexandria. The technique is much finer; there is very little indication of the tendency to flatten the relief, to isolate the figures and place them in frontal poses, nor do we find the oriental motifs which appear in Antioch at this time. A comparison of the Antioch mosaic of Hermes carrying the infant Dionysus (fig. 26), with the Constantinople figure of a soldier bearing shield, sword and spear is particularly instructive;¹² form and movement are ably rendered in the latter and show no evidence of the descriptive drawing dissolving the body of Hermes into its component parts.

The tradition of Hellenistic painting also survives in the bema mosaics of the church of the Dormition in Nicaea, a city which was in close touch with the capital. Since Schmit's careful study, the late eighth or ninth-century date advanced by Wulff can no longer be accepted, and convincing arguments have been presented for dating these mosaics in the sixth century.¹³ The archangels stand in the hieratic atti-

10. C. R. Morey, "Notes on East Christian Miniatures," THE ART BULLETIN, XI, 1929, p. 57.

11. J. H. Baxter, "The Secrets of Byzantium," *The Times* (London), Oct. 26 and 28, 1935; July 13, 1936; Jan 11 and 12, 1937.

12. J. H. Baxter, *The Times* (London), July 13, 1936.

13. Th. Schmit, *Die Koimesis-Kirche von Nikαιā*, Berlin and Leipzig, 1927. See also, for the earlier date, H. Grégoire, "Encore le monastère d'Hyacinthe à Nicée," *Byzantion*, v, 1929-1930, pp. 287-293.

tude required by the subject, their heavy robes and richly embroidered loros fall in straight lines, but both the facial types and the bold impressionistic modeling are in the "Alexandrian" tradition.

To these examples may be added the mosaics of Hosios David and St. Demetrios at Salonica, usually dated in the fifth and sixth centuries respectively, which must be considered in some detail since they have been assigned to Alexandrian artists of the seventh century. Professor Morey examines the legend regarding the apse mosaic of Hosios David according to which the painter who had been ordered to depict the Virgin suddenly discovered, one day, that his picture had been transformed into the Vision of Ezekiel. This mosaic, hidden by a layer of bricks and plaster by the order of Theodora, the daughter of the emperor Maximianus, who had commissioned the work, was miraculously discovered later by an Egyptian monk. "The connection of the Egyptian monk with the uncovering of the work may or may not have significance," writes Professor Morey, "but the employment, within the area dominated by the Greco-Asiatic style, at a period when the bearded type of Christ was universal in this style, of the beardless and short-haired type of Christ, is peculiar enough to have given rise to the confusion of the figure with the Virgin, and the story of the miraculous transformation. Such an intrusion into the Greco-Asiatic iconography of Salonica on the part of an Egyptian type again suggests the intervention of an Alexandrian exile" (p. 190).

One important correction should be made: the Christ is not short-haired but has long hair falling to his shoulders. This is clearly visible on the reproductions, and it is also specified in the description given by Mr. Xyngopoulos.¹⁴ It thus follows the type preserved on all fifth and sixth-century works found in Constantinople or its suburbs and not the short-haired "Alexandrian" model. But, apart from this, how much can one rely on an account of the type of the Διήγησις for an indication of the date of the mosaic? The text cannot have been composed before the end of the ninth century, for the writer places the discovery of the mosaic after the Iconoclastic period.¹⁵ It is doubtful if any memory of the surprise which some one may have felt in the seventh century, at seeing a beardless Christ, would have survived for two centuries; all the more so since the legend relates that when the Egyptian monk, warned by a vision, arrived in Salonica he could find no one who had ever heard of the mosaic.

The iconographic arguments for dating this mosaic in the seventh century are that the Vision of Ezekiel does not appear before the sixth century, or the arc of heaven as the Savior's seat before ca. 600. But so few monuments of the Early Christian period have survived that it would be very dangerous to draw conclusions from an *argumentum ex silentio*. Furthermore, the examples of the Vision of Ezekiel and the arc of heaven, cited by Professor Morey to prove a

14. A. Xyngopoulos, "Το Καθολικόν τῆς Μονῆς τοῦ Λατάμου ἐν Θεσσαλονίκῃ καὶ τὸ ἐν αὐτῷ ψηφίσατόν," *Ἀρχαιολογικὸν Δελτίον*, 1929 pl. vi, p. 162, fig. 22.

15. The text has been assigned to the twelfth century by V. Grumel, "La mosaique du 'Dieu Sauveur' au monastère de Latome à Salonique," *Échos d'Orient*, xxix, 1930, pp. 165-171.

later date than the sixth century, tend to show that these themes did exist before that time. In the sixth century frescoes of Bawit the Vision of Ezekiel is sometimes combined with that of Isaiah in the apse decorations; as a rule, the apostles and the Virgin Orans, or the Virgin Enthroned with the Child, appear in the lower part of the apse and the entire composition illustrates the eucharistic prayers. In the Rabula Gospel elements of the Vision of Ezekiel are introduced into the scene of the Ascension. These combinations with other themes suggest that the Vision of Ezekiel may have been represented separately before the sixth century. As for Christ seated on the arc of heaven, the earliest example mentioned is an encolpium *ca.* 600, and one could hardly credit the humble artisans who made such objects with the invention of this variant. The late fifth-century date of the mosaic of Hosios David is corroborated by the paleography of the inscriptions; this has been demonstrated by Weigand through comparisons with numerous dated examples.¹⁶ The fifth-century date is also borne out by the style and technique. The landscape background does not militate against it, since other works show that the pictorial style was known and used at this time in the Constantinopolitan area. The analogies noted by Mr. Xyngopoulos between the Christ at Hosios David and the Good Shepherd at Galla Placidia were rejected by Professor Morey, in an earlier article, on the ground that the "Good Shepherd of Ravenna turns His head to a Hellenistic three-quarter pose, while the Christ of our mosaic is much more frontal."¹⁷ But apart from the fact that the frontal pose is to be expected in a composition like the Vision of Ezekiel, which differs essentially from the less hieratic figure of the Good Shepherd, a number of other significant similarities are brought out by Mr. Xyngopoulos as well as important differences between the mosaics of Hosios David and sixth-century examples.¹⁸

Professor Morey considers that the "ex-voto" mosaics above the arcade dividing the two north aisles of the church of St. Demetrios at Salonica were executed at the same time as the medallion heads of St. Demetrios and two ecclesiastics, under which could be read an inscription referring to the restoration of the church after a fire at the time of Leo, a restoration which must have taken place about the middle of the seventh century. Other scholars are of the opinion that these medallions, which overlapped on the neighboring scenes, were inserted into a decoration executed at a previous time. In answer to this Professor Morey cites the church of S. Maria Maggiore where the dedicatory inscription of Sixtus III cuts off the feet of Peter and Paul in the composition above it. At St. Demetrios, however, it is not so much the inscription as the medallions themselves which intrude into the scenes on either side, and they also cut into the ornamental border which, in the other mosaics, runs freely above the figures. Another, and perhaps more decisive reason for Professor

Morey's seventh-century dating is the landscape background which appears in two compositions behind hieratic figures (fig. 205). This occasional use of landscape is compared to the interruption of Asiatic practice at S. Maria Antiqua and it is suggested that an artist exiled from Egypt was also employed at Salonica. But at S. Maria Antiqua the Annunciation in the "Alexandrian" manner covers part of the wall of the sanctuary previously painted in a different style, while at St. Demetrios the landscapes occur in the same small panels as the frontal figures. The personages more freely disposed in space are less carefully modelled than the frontal portrait of the saint, nor is there any significant difference between the figure style of these panels with landscape elements and the other mosaics of the aisle. Furthermore, those who were able to study these mosaics before their destruction by fire in 1917 have pointed out differences between the medallion heads and the "ex-voto" mosaics of the aisle, both in the size and the color of the cubes which had been used. One may also note the stylistic similarities between these aisle mosaics and Constantinopolitan works of the sixth century. For instance, in the group of the Virgin enthroned and flanked by two angels, the unified composition and the graceful curve of the angels recall the portrait of Juliana Anicia between Magnanimity and Reflection in the Vienna Dioscurides.

We cannot go further into the discussion of the mosaics of these two churches, but the evidence presented by other scholars for dating them in the fifth and sixth centuries does not seem to me to have been refuted, nor is there any reason to suppose that Alexandrian exiles introduced the pictorial manner since this area was not "dominated by the Greco-Asiatic style."

A thorough discussion of the much disputed problem of the Joshua Rotulus and the Paris Psalter would involve a study of tenth-century Byzantine art and cannot be attempted here. A few reasons, however, may be given to show why, in spite of the arguments summarized in this book and presented more completely by the author in a recent study,¹⁹ the late seventh-century date of these two manuscripts and their attribution to Alexandrian exiles do not seem definitively proved. First of all, this early dating rests partly on the assumption that the "Alexandrian" style had survived in Alexandria until the Arab conquest, and that only Alexandrian artists could have reproduced the pictorial style of the early Septuagint illustration. But neither the pagan nor the Christian works of the Delta show such a strong survival. The second and perhaps more important point is that the comparisons made between the frescoes of S. Maria Antiqua and the miniatures of the Paris Psalter show that these works belong to the same general tradition rather than to the same period. The Angel of the Annunciation at S. Maria Antiqua and the head of Moses from the Paris Psalter (fig. 206) are not any closer in style than, for instance, the "Actor Dedicating a Tragic Mask" from Herculaneum and the Prophet Zechar-

16. E. Weigand, review, *Byzantinische Zeitschrift*, xxxiii, 1933, pp. 211-215.

17. C. R. Morey, "A Note on the Date of the Mosaic of Hosios David, Salonica," *Byzantion*, vii, 1932, p. 341.

18. Xyngopoulos, *loc. cit.*, pp. 161-172.

19. C. R. Morey, "The Byzantine Renaissance," *Speculum*, xiv, 1939, pp. 139-159.

riah in the tenth-century Turin manuscript B.I.2.²⁰ The "striking analogy" noted between the lower part of the figure of the Mother of the Maccabees at S. Maria Antiqua and the same detail in the allegory of "Night" in the Paris Psalter may be observed in a number of other examples, for instance, in the portrait of St. Mark in the late tenth-century Gospel at Mount Sinai, no. 204.²¹ Moreover, some of the miniatures of the Paris Psalter are compared with the paintings of S. Maria Antiqua dating about A.D. 650 and earlier, others with the frescoes executed in A.D. 705-707. The stylistic differences observed by Miss Avery between these two groups of paintings are convincingly explained by the changes which occurred over a period of time. But in the Psalter they appear in miniatures painted at the same time by different artists, and it seems strange that the miniaturist, "Master B," working in Constantinople by the side of "Master A," should have introduced exactly the same peculiarities as the Roman painter of S. Maria Antiqua who was a distant follower of the Alexandrian exiles.²²

The date *ca.* 700 assigned to the Psalter presents other difficulties. If the ateliers of the Delta alone had retained the "Alexandrian" tradition and could train artists to work in this style, the "Master A" of the Paris Psalter must have been more than a boy when he fled from his native city conquered by the Arabs in 641. Yet more than half a century later he is still working, with a vigor and freshness which belie his old age, having preserved the style of his youth free from the influence of the city in which he had been living for many a long year. Another difficulty raised by the date is the state of Constantinople at the time. Few periods in the history of the Byzantine empire present as sad a picture as the latter part of the seventh and the beginning of the eighth century. Pressed by the Arabs from the East, by the Slavs and Bulgarians from the West, Constantinople was in a state of anarchy which lasted for almost thirty years. No less than seven emperors ascended the throne during this period, most of them usurpers, and each uprising was followed by cruel repressions. All cultural pursuits seem to have been neglected: there is not a single historian, no writer of merit, no mention of any artistic activity. One can hardly imagine that two of the finest manuscripts which have come down to us could have been produced at a time when the life of the city had sunk into depths hardly equalled before or after.

This survey of the art of the Delta, of Constantinople and the cities in its sphere of influence leads us to the belief that the term "Alexandrian" is a mislead-

20. K. Weitzmann, "Probleme der mittelbyzantinischen Renaissance," *Jahrbuch des deutschen archäologischen Instituts, Archäologischer Anzeiger*, XLVIII, 1933, pp. 355-356, figs. 16 and 17.

21. *Ibid.*, pp. 357-358, figs. 18 and 19.

22. I have purposely omitted from the discussion of the art of Constantinople the silver plates with mythological scenes from the Hermitage Museum in Leningrad, dated by their "sterling" stamps in the second half of the sixth and early seventh centuries, since their provenance is not certain. They have, however, been assigned to Constantinople, with convincing arguments, by L. Matzulewitsch, *Byzantinische Antike*, Berlin and Leipzig, 1929; see especially, pp. 61-63. The silver plates from Cyprus are allied to this group.

ing one, particularly when dealing with works of Christian art. The pictorial style did not survive in Alexandria any longer or in any purer form than it did elsewhere in the Eastern Mediterranean. If all the examples which display an interest in landscape background, in the plasticity of the human form, and in freedom of movement were to be attributed to hypothetical Alexandrian exiles and dated in the seventh century, we should have to suppose that throughout the years when Alexandria was an integral part of the Byzantine empire and maintained constant intercourse with the metropolis and other important cities, an art flourished in Alexandria which exercised no influence outside. Only when the bonds were severed by foreign conquest would this art have become known to the empire.

Our long discussion is proof, if such proof were needed, of the importance of Professor Morey's book. It is to be hoped that its challenging character will reawaken interest in the many problems of Early Christian Art, and that, through a closer comparison with examples the origin of which is certain, the artistic trends of the leading cities will be reconsidered. Local schools doubtless existed, especially in the more remote sections of the Empire, but in the opinion of the present writer the outstanding trait of the Mediterranean world in this period is the international and eclectic character of its art. Alexandria, Antioch, and Constantinople were cosmopolitan centers and many of the significant differences appear, not among the works from these cities, but between the products of the coast area and those of the hinterland.

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ANTHONY BLUNT, *François Mansart and the Origins of French Classical Architecture*, London, The Warburg Institute, 1941. Pp. 82; 34 plates. 15 s.

Anthony Blunt's *François Mansart* is a phenomenon. The lectures on which the book is based were given in the months immediately succeeding Dunkirk; the manuscript itself was prepared during the climax of the London air blitz. By the very fact of its existence this monograph is an extraordinary achievement, and one for which both the author and the sponsoring institution are to be congratulated.

Inevitably the substance of the book was affected by the difficulties of the times. It was not possible "to visit any of the buildings discussed . . . , to have access to the drawings mentioned, and even to find some of the most important sources in the way of books and engravings." The text suffers in consequence. The study could not include any new documentary material, so that nothing is added to the little already known of Mansart personally. For the same reason the author was confined to a discussion of fully authenticated monuments. Buildings whose attribution to Mansart was in the least doubtful had to be omitted.

Mr. Blunt acknowledges these shortcomings on the very first page, but he does not state the real reasons which induced him to publish the book in spite of them. One must accordingly give him the benefit of the doubt. It would be unjust to harp upon such un-

avoidable limitations. It is fairer to ignore them and to emphasize rather the many strengths and the occasional weaknesses which characterize Mr. Blunt's approach in general.

The author's announced purpose is to trace Mansart's evolution "from mannerism towards one of the subtlest and most sophisticated forms of classicism to which architecture has ever attained." In accomplishing this purpose Mr. Blunt had first to undertake two quite distinct investigations; he had to define the artist's *œuvre*, and he had to outline the contemporary intellectual and social situation. Then to synthesize these separate studies, Mr. Blunt had to analyze Mansart's style and show how his buildings were both a product of and an influence upon the culture of the times.

Even the first part of this program involved the author in some unusual difficulties. Almost all the structures with which he was concerned represent mere fragments of the original conception. For this the architect himself was largely to blame. Not only was Mansart extremely intransigent when dealing with his clients, he was in addition an expensive artist to employ. Rarely did he find a patron who was docile enough to give him a free hand and rich enough to see him through. Mr. Blunt has had complete success in the arduous task of reconstructing the architect's original intentions. The patience with which he has followed out the intricate history of the Val-de-Grace and the various projects for Blois is admirable. The clarity with which he has set forth the results of his researches will make his book indispensable as a reference.

Even more striking is Mr. Blunt's skill in dealing with the historical background. By analyzing the general economic and political situation as well as the characters and demands of Mansart's patrons he has succeeded in relating the buildings to a specific ideology. What is more remarkable in an architectural historian, Mr. Blunt suggests Mansart's connection with contemporary intellectual movements. So thorough is the author's knowledge of French seventeenth-century culture that he is able to draw many exact and illuminating parallels between the works of Mansart and those of his great contemporaries, Corneille and Poussin. Indeed, Mr. Blunt's achievements along these lines have rarely been equalled in other monographs dealing with Renaissance and Baroque architects.

It is only in uniting these preliminary investigations that Mr. Blunt is disappointing. He seems strangely unwilling to grapple with problems of aesthetic analysis. He explains Mansart's point of view in general; he describes Mansart's buildings in their particulars, but he never shows how those particulars are the inevitable result of the working of that point of view. Just at the crucial moment he takes refuge in a vague phrase. As an illustration one may cite his treatment of the design of the court façade of the Chateau of Blois. Mr. Blunt points out that Mansart uses three full orders in the middle pavilion, while on the wings he truncates the top order. "By this means Mansart is able to give an effect of continuity to the whole of his second floor, and at the same time to make the central pavilion

higher and more important than the wings. But he does this at the cost of sacrificing classical accuracy in the use of the orders. This is the most curious irregularity in the design." There we are left. Mr. Blunt makes no attempt to indicate why Mansart should have preferred a strong emphasis on mass to a classical regularity in the handling of the orders. Is this "curious irregularity" the result of a whim on Mansart's part, or is it the reflection of a basic aesthetic preference? In what sense can such an irregular artist be called a classicist? How does this whim or this preference for irregularity tie up with Corneille, with Poussin, or with the "essentially bourgeois, secular monarchy" of Richelieu and Mazarin?

This unwillingness to interpret the fundamental meaning of architectural forms involves Mr. Blunt in a series of difficulties. Perhaps it is the reason why he omits the question of Mansart's training. Some of the few facts known are given in *Thieme-Becker*, and it is possibly excusable that the author should not have repeated these. But why does he pass so quickly over the problem of the origin of Mansart's style; why does he fail to define the artist's debt to Solomon de Brosse and to the other French architects of the preceding generation?

Even more serious is the fact that Mansart's position within the whole trend of seventeenth-century French architecture is not made sufficiently clear. Nor does Mr. Blunt state the relationships and differences between contemporary French, Italian, and Flemish building, or between "classicism," "mannerism" and "the Baroque." Of course terms such as these are introduced frequently and glibly, and there are innumerable references to buildings not by Mansart in France, Flanders, and Italy. But the author when using these terms and making these references is both superficial and vague. When he cites borrowings of motifs, he never analyzes the principle which controls them. When he talks of styles, he seems to be playing with catchwords rather than discussing points of view and their effect upon one another. A good instance is the word mannerism. This term is currently used either to designate the period between the High Renaissance and the Baroque or else as a name for the anti-classical movement in sixteenth-century art. Its meaning as applied to architecture has never been properly established, and its applicability to French architecture has hardly been seriously discussed. What, then, is one to understand when Mr. Blunt refers—as he does repeatedly, but without elucidation—to the mannerism of Mansart's early designs?

Thanks to these few but crucial failures Mr. Blunt can not be said to have accomplished what he set out to do. The reader has little more understanding of Mansart's subtle and sophisticated classicism when he is through than when he started. But the author has achieved other things, no less significant. He has demonstrated the great interest of François Mansart and the need that exists for a definitive study of his career. He has also shown his own competence to write such a book, granted only that on the second try he is willing to take the basic problem of architectural style by the horns. One cannot doubt that he will be willing, when one considers the skill with

which in this monograph he has handled every other phase of the subject. One cannot but look forward, therefore, to that final study, that study for which this book provides such a stimulating if such a teasing introduction.

JOHN COOLIDGE
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SAMUEL A. IVES AND HELMUT LEHMANN-HAUPt, *An English Thirteenth-Century Bestiary, a New Discovery in the Technique of Mediaeval Illumination*, New York, H. P. Kraus, 1942. Pp. 45; 81 pls. \$1.85.

There are features of this small publication that are unusual and very much that is commendable. It is a study of a manuscript now in the hands of a well-known New York book-dealer, the book being issued by him as a special supplement to his own trade publication. There is nothing unprecedented about this, of course, but Mr. Kraus is to be complimented on his judgment in producing the monograph solely as the careful and ungilded study of two competent scholars, in an adequate, but modest format quite in keeping with the workaday character of the manuscript discussed.

The manuscript in question is a Bestiary written and illustrated in England about A.D. 1250. Both text and illustrations present exceptional features which far surpass the modest artistic qualities of the volume.

Dr. Samuel A. Ives of the Plimpton Library at Columbia University has studied the text in relation to the Physiologus textual tradition as at present determined by scholars. He shows the contents to include elements related to both of the two main divisions of the Physiologus textual *stemma*. The text opens with Book I (the *Aviarium*) of the *De Bestiis* in the redaction ascribed traditionally either to Hugo de St. Victor or Hugo of Folieto. Although the text follows closely that published by Migne (*Patr. lat.* 177), there occur interpolations. A second section of the manuscript turns out to be two chapters of the Physiologus from the other branch of the textual tree as represented by Brussels, Ms. Lat. 10074 and other very early versions. The text of the New York manuscript concludes with the *Dicta Chrysostomi*, a treatise which is really one of the subdivisions of the second main stream of the Physiologus, and traces its history back to the Greek parent of the entire tradition.

In commenting upon this mixed text, Dr. Ives contributes a brief analysis of the chief texts of Physiologus, in order to point out the relation of the Kraus manuscript to the several established branches of the stream. Although existing publications do not permit complete examination of the parallels to an apparently closely related manuscript, British Museum Sloane 278, enough data are gathered to show that the New York example, both by its affinities to several streams and its divergences, "exhibits a text of considerable importance in the tradition of the Latin Physiologus, collecting, as it does, from various sources the material whereby we can reconstruct . . . the archetype" of the second Latin branch of the whole stream.

In his discussion Dr. Ives goes only as far as published examples of the related texts permit. To the early publications of Heider and Migne have more recently been added the edition of the Greek Physiologus by Sbordone and the several preliminary editions of Latin versions by Professor Carmody. There are several important manuscripts still awaiting full publication, and an analysis of all codices in a *editio critica*, before the complex questions regarding the Physiologus can approach solution. Dr. Ives' study is a contribution toward this final stage.

Of more direct interest to students of art is the second part of the publication, wherein Dr. Hellmut Lehmann-Haupt, Assistant Professor of Book Arts at Columbia, discusses the miniatures of the manuscript. These present the beasts, birds, people, and geological forms proper to the text with the firm and somewhat humorous draughtsmanship characteristic of English work of the mid-thirteenth century. The individual subjects are well designed within their rectangular, circular, or mandorla frames.

The pictures are all assembled at the front of the volume, from two to six consecutive subjects being gathered on a single page. Professor Lehmann-Haupt points out that although no illustrations exist in the text of the manuscript, spaces have been provided throughout for all but three of the seventy pictures. These unfilled spaces apparently correspond approximately in shape to the appropriate miniatures, but are somewhat smaller in size. With a few minor exceptions, the pictures follow the text in order and detail, and captions on the miniatures correspond to chapter-headings in the text. Because of these points, the author suggests that the manuscript may be considered as a model-book for an atelier. He also points out that the illustrated pages are of thicker vellum than the text-section, that they appear somewhat more worn, and that they exhibit greater qualities of originality and fresh invention than most mediaeval illuminations. He explains the peculiar features of the text layout as indicating that this as well as the pictures served as an example for copyists.

Furthermore, Dr. Lehmann-Haupt is able to produce some rather startling evidence of the way in which this particular model-book was used. Many of the pictures are found to be perforated along their silhouettes by a fine series of pin-pricks. It has long been known that pricking through a quantity of sheets was used to guide the ruling of the written lines in mediaeval books, but its use in connection with the pictures themselves is an unrecorded feature. The author with great plausibility refers to the transfer process known to the Renaissance artists as pouncing. We have many contemporary descriptions of the use of this method by Renaissance artists, who transferred cartoon designs by "pouncing" the pricked outlines with a small bag of powdered charcoal or color. The original drawing or cartoon was transferred by pricking to intermediate sheets which were then used in the pouncing process. This saved the originals from being spoiled by the charcoal dust. Although there are no European records of this process of transfer previous to about 1400, it is known to

have been used in China previous to A.D. 1000. It is so simple a method of reproduction that its use may well have developed spontaneously anywhere at any time.

There is considerable literature concerning mediaeval model-books, but it is scattered and scrappy. A careful, critical assemblage and examination of all relevant materials, both artistic and written, is a sorely needed contribution to our understanding of mediaeval artistic and stylistic traditions, the transfer of foreign influences, and the organization of ateliers. As it is now, there is a good deal of loose talk on the subject. On one hand every group of illustrations that has come down to us devoid of text is referred to as a "model-book," and on the other some students deny that model-books were used in manuscript ateliers at all, asserting that they were tools for other crafts only.

Professor Lehmann-Haupt lays himself open to none of the criticism due these extremes. In my opinion he has demonstrated quite clearly that this is a model-book and that it was employed in facilitating the reproduction of manuscripts of a category for which there was popular demand. To his own points in support of his thesis, one may add the observation that the very manner in which the pictures are assembled on the pages without satisfactory relation to each other in such matters as size, width, etc., strengthens the argument. Figure 2 and Figure 3 are especially eloquent in this respect.

The question at once arises as to whether it is possible to detect traces of pounce transfer in any available manuscripts. The present monograph will stimulate observations relating to this point. I have examined a number of Gothic books in the light of Dr. Lehmann-Haupt's discovery with results that require more careful study and fuller exposition than is appropriate here. It is sufficient to mention that with the clue supplied by the present work I have come to the conclusion that *tracing*, whether by pouncing or some other process, formed a much more general procedure in mediaeval shop production than has been realized. This accounts for the extraordinarily dry and expressionless quality of most mediaeval underdrawing.

Another point that has come to light is that many Gothic books, especially English and Flemish ones, of a moderately routine quality and nature, very frequently exhibit irregular prickings in the margin immediately above the miniatures. I had always assumed that these represented the traces of a protecting silk cover once sewn in place by some owner. However, systematic notation of the occurrence of such prickings shows them to be too frequent for such an explanation. The prickings occur only in "shop pieces" and not in books of exceptional richness and character. It is possible that they played a part in securing the pattern for transfer.

All these and many more questions suggested by the book are properly stimuli for further investigations. In so small a publication, obviously, the discussion neither of the text nor of the miniatures can lay claim to being complete or exhaustive in any way. That they provoke speculation is clear. Gratitude is

due both Dr. Ives and Dr. Lehmann-Haupt for contributing their observations in a form so useful to further investigators.

DOROTHY MINER
Walters Art Gallery

ELMER G. SUHR, *Two Currents in the Thought Stream of Europe* (The Johns Hopkins University Studies in Archaeology, No. 33), Baltimore, The Johns Hopkins Press, 1942. Pp. 469. \$5.00.

In this elaborate study, which bears the subtitle "A History of Opposing Points of View," the author has undertaken to trace "the conflict between human nature and nature at large on the continent of Europe as it has affected the cultural development of both peoples and individuals from the days of the Greek to our present day." His purpose, so he assures the reader in the Introduction, is not to write a detailed account of historical events but "a history of man and his efforts to reconcile himself to the circumstances of his experience." For the author this reconciliation can, fundamentally, be approached in only two ways, which find expression in the opposing points of view of the "absolutist" and the "broad intellectual"; the first moulds nature at large and man's relation to it according to *a priori* principles, while the second explains it through the use of reason. After elaborating upon and paraphrasing this distinction, the author summarizes the philosophies of Plato and Aristotle, whom he regards as ideal exponents of these two contrasting attitudes, even though he admits that Parmenides and Heraclitus might have served as well, were they better known. However, Dr. Suhr refuses to accept the thought of the two great philosophers as equally representative of Greek civilization. This rôle is reserved for Aristotle, who is hailed as the father of much of our modern thinking, while Plato is represented as a spiritual foreigner in his own land, basically Oriental in outlook, and his importance is attributed to the fact that he adapted the "point of view of the Oriental" to the needs of the European absolutist. He is "a prophet of the Middle Ages whose unwavering confidence in the absolute has no need of rational explanation or support." The most uncompromising absolutism the author finds in the mind of the Orient, which includes not only the Near and Far East but the Byzantine realm and all of Eastern Europe as well. The latter areas are therefore excluded from discussion as fundamentally alien to the European mind. The author himself is strongly partial to the "broad intellectual" point of view, which he looks upon as having dominated all aspects of life in the Greece of the Classic era. As early as the fourth century B.C., however, a rising tide of Oriental influence progressively destroys this attitude, and continues to gain dominance throughout the Hellenistic and Roman periods, culminating in the Middle Ages. The Renaissance is conceived as an attempt, largely unsuccessful, to superimpose the Classic Greek point of view upon the absolutist mode of thought of the Middle Ages. This mediaeval heritage Dr. Suhr regards as so pervasive that it continues to dominate large parts of modern Europe as well.

In support of these conclusions, the author devotes more than 400 pages to a discussion of the prevalent modes of thought in Europe during the last 2500 years, drawing mainly upon philosophy and art for his evidence. Political, economic, and sociological considerations are largely neglected. Dr. Suhr rarely acknowledges his sources of information, and the scattered bibliographical references do little to reassure the reader that the author has attached any importance to the task of seeking out the most competent opinion of specialized scholars as the basis of his own views. His estimate of Rembrandt, to quote but one instance, is taken from chapter xi of Thomas Craven's *Men of Art*, which he praises as "one of the most sympathetic and illuminating criticisms of Rembrandt in all art literature." Even a casual examination will reveal large portions of the text to be a welter of factual errors, of hopelessly inadequate and obsolete interpretations, and misconceptions of every sort. To discuss all of these passages would be far beyond the scope of these pages, nor does this reviewer hold himself competent to undertake detailed criticism in the many different fields of learning involved in Dr. Suhr's argument. The following samples, selected with a view to the particular interests of the readers of this journal, may be trusted to speak for themselves. For Dr. Suhr, the Middle Ages are synonymous with "the Gothic period"—the Romanesque is omitted altogether—during which "the hand of the artist was guided by the priest, just as in Egypt," so that "he was nothing more than a craftsman for copying images from set rules." The mediaeval artist "concealed form as much as possible beneath a play of light and shadow," in contrast with the "firm line" of classical Greek art. "France was the most mediaeval of all European nations." The sculpture of the great French Gothic cathedrals, remote from any classical prototypes, follows the lines of arch and column in every curve. These statues "have little to convey of their own accord . . . if we have no interest in the narrative they tell or in the message they bring." Torn from their original settings, they "have little meaning by themselves; they look like . . . the Parisian in a foreign country where he wanders from place to place with eyes that see not and ears that hear not, consumed by an inner longing for his native land. . . . When the European changed his point of view, the cathedral took refuge within itself and remained on earth a lost creature, like a black-eyed Italian in the cold bleak climate of England." "Line formed the kernel of all Florentine art," and Giotto is presented to the reader as "one of the first strong advocates of its powers and advantages in fresco." He was absorbed in "problems of linear perspective" and "must have studied the drawing of the Greeks." Dr. Suhr actually must have meant the Classic Greeks, since he has already dismissed the Byzantines as essentially Oriental. "Nearly all the Italian painters of the fourteenth century were content to follow Giotto"; Duccio and the Lorenzetti contributed nothing but "a few refinements." In discussing the figure of Mary Magdalene in Masaccio's Naples *Crucifixion*, the author observes that the painter "has learned something of the same power of the human back as George Watts has given

us in his 'For He Had Many Possessions'." The "fragile, doll-like" figures of Fra Angelico, "the St. Francis of painting, . . . create a religious atmosphere about themselves, the picturesque surroundings seem to radiate from [them] as the feathers of a peacock are spread out in the sunlight." The same artist also receives credit for a *Last Supper* he never painted. Botticelli's figures "form a group like a program of Viennese melodies." Special students of the master such as Edgar Wind or the late Aby Warburg might be interested to read that "we can talk as we may about the literary sources for his 'Primavera,' for his 'Athena and the Centaur,' for his 'Calumny'; there is little of Lucian or any other author to be found there. . . . There is no use in trying to lay our hand on anything and say that Botticelli was so and so, thought this or that, and painted such and such, nor is he an inferior master for this reason. . . . And after we have tried to study a series of his pictures in a gallery, we feel what Lowell said of Emerson after a lecture delivered at an advanced age, namely, that something beautiful had passed that way." In connection with the *Mona Lisa*, we read that "before Leonardo's day there were few artists in Italy who made a practice of representing the individual." Michelangelo's *Moses* is referred to as "the only survivor of any value" from the tomb of Julius II. Readers in whom this statement may have aroused undue concern over the present fate of the treasures of the Louvre, can seek comfort in the subsequent assertion that "in the Sistine chapel there is plenty of opportunity to study [Michelangelo] as a painter, a sculptor, and an architect." Raphael "painted with a lump of sugar in his mouth, . . . his arrangements of light and shadow are . . . often bordering on the clever, the bizarre." In trying to characterize the painter's work as a whole, Dr. Suhr states that "he specialized in nothing definite . . . , an achievement in verbal ineptitude that it would be difficult to equal. The Venetian painters clothed their figures in lavish garments "to conceal the nude form they handled so poorly." As a prime example the author cites the nudes of Giorgione. The body of the *Sleeping Venus* in Dresden is called "fat and clumsy"; it is "almost an accessory to the beautifully arranged garment at her side." Most of Dürer's best work is "as mediaeval as the best cathedrals of France," yet we are told in the same paragraph that "the patrons in Germany at that time never exerted as much influence upon religious art as in Italy." Hans Holbein the Younger "devoted much time in the early part of his career to engraving."

The art of the Baroque is dealt with rather summarily in terms of age-old clichés; it was "less sincere than the Gothic and hence more short-lived." The churches of the period are likened to "an Indian elephant overladen with trappings." Understandably enough, Rembrandt is regarded as a complete anomaly within an era of this character; the greatest and most typical Baroque painter was Rubens, who "used the same technique and interpretation for the interior of a slaughter-house as for his 'Judgment of Paris'." Inasmuch as there are no interiors of slaughter-houses by Rubens while Rembrandt produced several canvases of this kind, the reader cannot help

wondering whether Dr. Suhr has in this instance ventured into the dangerous field of reattributions. Rembrandt "knew how to draw after a fashion." His line, in contrast with that of Raphael, "tends to throw off association and defeats an effort to group figures"; it "defines the rugged individual of the North, the knotty oak of the Teutonic forest. The single figure of Raphael is weak; it must, like all Latins, follow the crowd to an absolute, merciful heaven of irresponsible human nature." In an effort to explain the development of landscape painting as a northern European phenomenon, the author deduces it from "the more objective point of view of the Teuton, especially the English"; the Italian "hardly went beyond the mediaeval in subject-matter" because "his point of view was too subjective." Why is it then that these same "Teutons, especially the English," played such a leading part in the growth of Neo-Classicism, a movement which Dr. Suhr explains as due to the fact that "the people of this century had nothing permanent to give of their own accord"? Even more negative is the author's estimate of contemporary art; it has "wandered far astray from life." The modern artist "runs away from life to the corner of a stuffy studio."

One of the most irritating features of Dr. Suhr's book is his inability to refrain from comparing the art and life of later periods with Classic Greece. This mental habit accounts for many of his lapses of judgment, as well as for his preponderantly negative attitude towards the world of today. The highest honor Dr. Suhr can bestow upon a work of art, whether it be the compositions of Giotto, the *Last Supper* of Leonardo, or the Sistine Ceiling, is to liken it to some piece of Classical sculpture. In most cases, however, Greek art is referred to for the sake of contrast, and usually the later work proves to be the loser in this contest. We read that the women of Signorelli are "ugly and repulsive . . . the Greek would have mistaken them for hermaphrodites"; and similarly, that the Greek "avoided going to the extremes of Mantegna." In an effort to elucidate the meaning of the Christ in Leonardo's *Last Supper*, Dr. Suhr contrasts the figure with the Athena in the Aegina pediments, whom he describes as "an emblem of broad intellectual control reflected in the movements of the group before her, as they grapple with the problems of experience." His none too favorable opinion of Raphael is epitomized in the statement that "it is doubtful, had Raphael lived among the Ancients, if Archaeologists would care to collect his fragments except as novelties." Nor is the superiority of Greek civilization restricted to matters artistic. For Dr. Suhr, it is evident in the realm of philosophy and morals as well, particularly in comparison with recent times, with seventeenth-century Holland for instance, where "truth was exchanged like any article of trade . . . , where aspirations seldom rose beyond the material level." The author insists that the Greek individual of the fifth century was "a more complete entity than the contemporary man," and that "it is easy to realize how much greater was the individual [of the days of Pericles] who enjoyed direct contact with all that happened about him and received all his information first-

hand," while we of the twentieth century "sacrifice the human for the advancement of specialized knowledge."

Dr. Suhr's own attitude towards the specialized knowledge of our time is illustrated clearly enough by the passages quoted in the preceding paragraphs of this review. Yet the reader would be less than fair if he were to base his judgment of the book as a whole on the quality of its factual content alone. The author's main aim has been to develop his own analytical approach to what he calls the thought stream of Europe, and the value of his work hinges upon the validity and usefulness of this major purpose no matter how clumsy he may have been in applying his method to the available historical material. There can be no quarrel with the fundamental premise of Dr. Suhr's argument, namely, that the history of man is the history of the inescapable conflict between human nature and nature at large. Unfortunately, the picture of this conflict in the author's mind omits all but a few of the many variable factors in this most complex of all equations. The basic fallacy of his position is the assumption that man has a genuine alternative in either explaining "the world about himself and his relation to it" by the use of reason or in "moulding it to suit his own *a priori* principles." Even the most rational *Weltanschauung* implies a good many *a priori* principles; on the other hand, not even the most ardent mystic can dispense with reason altogether. Aristotle and Plato are not nearly so far apart as the author would have us believe. If, then, the two opposing points of view in their unadulterated form lie beyond the scope of human nature as we know it through the study of history, anthropology, and psychology, their usefulness as a measuring scale for the cultural development of Europe is more than questionable. As ideal opposites, the absolutist and the broad intellectual even lack the psychological plausibility that must be conceded to such types as the rationalist and empiricist of William James. The most serious objection to Dr. Suhr's approach, however, is that it does not admit of viewing history as a sequence of events linked in terms of cause and effect and forming an evolutionary pattern. It is, therefore, fundamentally incompatible with the methods that have guided the modern historian. The author concedes only "personal and moral" values to the study of the past; beyond that, "we can reason and argue until doomsday without finding a proof for cause and effect in human relations or in the events of history . . . the two points of view must be taken for granted." The spiritual ancestry of this idea is not hard to trace. Ever since Nietzsche coined the terms "Apollinian" and "Dionysian," such interpretations of history in terms of antithetical categories have been the special prerogative of German authors. In the field of fine arts, Wilhelm Worringer's *Formprobleme* with its polarity of "Classic" and "Gothic" is the most widely known work of this kind. It is difficult to regard Dr. Suhr's own scheme as anything but a rather lame and belated sequel to these earlier attempts, even though it may be impossible to define his exact sources of inspiration. Indeed, his text contains many Germanisms of thought of the less pleasant variety.

Little wonder, then, that the author sees no difficulty in postulating, not only the two points of view themselves, but their fixed distribution according to nationalities. Throughout his discussion of Mediaeval, Renaissance, and Modern Europe, this concept of the nation forms the basic unit. The book is replete with elaborate analyses of the "typical" Italian, Frenchman, German, and Englishman in terms of the absolutist and the broad intellectual, and individuals are considered only as variants within the established mental pattern of the nation that produced them. In the course of the past hundred years, when nationalistic thinking was at its height, there have been many futile attempts to define the character of the average inhabitant of the various European countries, but few of them are as unsubtle and full of time-honored catch phrases as Dr. Suhr's. To him, the Romance nations are closest to the Orient in attitude; the German mind, though basically absolutist, is on occasion capable of the broad intellectual approach, while the Englishman is the only one in the contemporary world who actually champions the latter attitude. Compared to him, the south European is "a step nearer to the animal." The English Government is hailed as the only true democracy of our time, and the chapter on the nation ends with a paean of praise that should do much to keep the home fires burning: "Whatever we may say about this Englishman, we cannot deny that his presence in the modern world has been one of its greatest blessings in more ways than one, and so God save the English, their king, and all they stand for!" It goes without saying that the author constantly discovers these allegedly immutable and pervasive traits in the artistic production of the European nations as well. The pitfalls of this *idée fixe* are well demonstrated in the following sample: Dr. Suhr concludes from his analysis of the German character that "painting, with the spontaneity necessary for its composition, can never become the major art of Germany," and tries to prove his point by referring at length to the work of Dürer while omitting Grünewald altogether. Readers who happen to be unfamiliar with the latter artist may feel inclined to agree for the time being, but what are they to do when, a few pages farther on, they are asked to look upon Rembrandt as "the highest expression of German feeling in painting"? Here the author has cut off his own retreat, since he chooses to deny the Dutch a national character of their own, dismissing their language as "a low German dialect." Whenever individual deviations from the rule are too obvious to be ignored, Dr. Suhr resorts to such absurd devices as calling Michelangelo the most Oriental among Italian artists, whereas Raphael appears to him as the most French. No less debatable is the statement that Leo Delibes is the composer most typical of France and that he produced the most distinctive French melodies.

As long as observations of this kind are confined to art and philosophy, the amount of damage they can do remains comparatively small; it is only when they enter the realm of recent political history that the reader becomes fully aware of the treacherous path along which he is being led. In the course of a plea

for increased recognition of the different points of view of other nations, Dr. Suhr violently protests against "the old notion that all men are created equal." "The differences in human nature and its deep-seated aristocracy must be taken for granted before an effective democracy can be built up, and to assume that the mind of man is the same the world over or that all mankind is eagerly waiting to be made safe for democracy is tantamount to pushing the bull into the china shop." Unfortunately, the author does not divulge how he proposes to establish an effective democracy without the premise that all men are created equal. Nor does he seem to realize that he has completely perverted the meaning of a phrase which embodies the noblest political ideal yet conceived by man. This "old notion" as maintained by Jefferson and Lincoln never was intended to imply that "the mind of man is the same the world over"; it simply states what every adult citizen of the United States should know, that all men have an equal claim to certain basic human rights, no matter what their differences of origin or of intellectual and emotional equipment. Equally dangerous is the author's argument in favor of tolerance towards the mental outlook of other nations when he appears to accept many of the political aims of the Nazi regime as legitimate expressions of "the German point of view." Such, at least, is the interpretation that is forced upon this reviewer by the following passages: "Germany includes all the German states, not omitting Austria which is now an integral part of political, as she always has been a part of cultural Germany, along with many of the border peoples whose culture and language show many similarities to that of the German. . . . In these states Germany possesses the roots of our future internationalism, and if there is ever to be a United States in Europe, much can be learned from a state which has within her boundaries Vienna, the representative of past empire, and Berlin, the center of modern Germany, whose acme has perhaps not yet been realized." Dr. Suhr's synopsis of German history since the First World War does little to change the impression left by these sentences. "[Germany] entered that war with enthusiasm and called a halt before her own land came into danger, and in many respects converted a defeat into a victory. For a second time France has been responsible for a strong impetus beyond the Rhine. The same energy she [Germany] used in military affairs before the war she later applied in other directions as well, until she forged her way to the fore again, while her enemies were quarrelling over debts and the limitations of armaments. Not an Allied general was able to accomplish what Hindenburg did against the Russians at Tannenberg and then adjust himself to a new state of affairs after the war and become president of a republic. The Allied generals spent their time quarrelling with one another in their memoirs." Apparently not even two years of the Pétain regime have been sufficient to convince the author that an Allied general was capable of a similar "adjustment." We read further: "When the German refused to be punished or subordinated, and other nations lost their momentary interest in her welfare, France grew indignant and impatient with all her neighbors, she

surrounded herself with fortifications and made treaties, expecting others to abide by her standards; Germany attained her ends in spite of all the entanglements of treaties. A nation, like an individual, striving to overcome great obstacles accomplishes more for her own benefit than the rich nation riding abreast the wave of prosperity." Could it be that Dr. Suhr is unaware of the Depression and of Appeasement as determining factors in helping Germany to "attain her ends" during 1929-1939, or did he from his Olympian vantage point ignore them as insignificant? His views are as irresponsible as they are alarming at a time when a clear realization of the causes of the present conflict is of vital importance, especially for those holding positions in higher education.

The reviewer who finds himself unable to discover anything but negative qualities in his subject is confronted by a profoundly disagreeable task. The harsh opinions expressed on these pages have been written with more than ordinary regret, since Dr. Suhr's book has been issued as part of a distinguished series of monographs which includes many contributions of undoubted scholarly excellence.

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F. VAN DER MEER, *Maiestas Domini: Théophanies de l'Apocalypse dans l'art chrétien, étude sur les origines d'une iconographie spéciale du Christ* (*Studi di Antichità Cristiana, pubblicati per cura del Pontificio Istituto di Archeologia Cristiana, Vol. XIII*), Città del Vaticano, Rome, Paris (Société d'Édition "Les Belles-Lettres"), 1938. Pp. 546; 99 figs. 160 frs.

The theme of this book is one of the most fascinating in the realm of Christian mediaeval iconography, and the author is quite correct in his statement that no comprehensive study had previously been devoted to it. The *Maiestas Domini* in the proper sense is the representation of Christ as the ruler of the universe seated on a throne or on a segment of the firmament; his figure is encircled by an aureole and surrounded by the four living creatures of the Apocalypse which, since St. Irenaeus, have been identified with the symbols of the four evangelists; sometimes this composition is enriched by angels and by the four and twenty ancients of the Apocalypse. While a large part of Van der Meer's book deals with the origins and the development of the *Maiestas Domini* proper, the scope of his work is a broader one, as indicated by the subtitle. He studies all the iconographic formulae for the diverse apocalyptic visions of God up to the end of the middle ages. Thus he distinguishes four principal groups: (1) the veiled theophany of the Agnus Dei; (2) the Son of Man; (3) the "Anonymous" or "The One Sitting on a Throne," a group which includes the *Maiestas Domini* proper; (4) secondary theophanies.

The chief merit of this iconographical study lies in the fact that the author does more than merely describe the derivation and the changes of a theme. He makes, on the contrary, a largely successful attempt to penetrate into the religious content and especially into the liturgical background of certain formulations of Christian art and of their metamor-

phoses. The book is valuable, not only for its learning; it should also be a source of genuine inspiration to anybody interested in the renewal of liturgical art.

It was not the author's intention to deal with the formal aspect of apocalyptic art in a systematic way. But he gives an excellent account of the relations between the iconographic and the stylistic treatment of the theme in ancient and mediaeval art (pp. 435 ff.), showing at the same time a keen sense for the beautiful and symbolically significant. Thus he connects the persistence of stylistic elements from late Antiquity in the apocalyptic theophanies of mediaeval art with their essentially triumphal and therefore late antique character. The prototypes of apocalyptic art were created in the times of Theodosius the Great and Leo the Great. They reflect the Church's triumphal mood in that era in which the ceremonial of the late Roman emperors and their apotheosis in works of art were taken over, so far as the external scheme was concerned, to serve for the triumphal art of Christ and His angelic court. Now the triumphal visions of the Apocalypse (and especially the theophanies) which chiefly interested the early Christian artists and their public were predominant also in mediaeval apocalyptic art, whereas the cataclysms did not receive a really adequate representation before Dürer engraved his great apocalyptic series of woodcuts. Thus the predominance of late-antique triumphal subject matter ensured the comparatively long survival of elements of late-antique style in mediaeval illustrations of the Apocalypse.

Van der Meer also does well to bring out the "rivalry" between the *Maiestas Domini* and the Last Judgment in the late twelfth and thirteenth centuries, and the ultimate victory of the latter; the reason for this victory he sees in the "humanization" (*invasion lyrique*) that occurred during the transition from the Romanesque to the Gothic style. Whereas in the *Maiestas Domini* Christ had been visualized in the tremendous and mysterious, but somewhat remote and unpersonal splendor of the Apocalypse, the vision of Christ as the Judge of mankind on the day of doom was much nearer to the new and more personal, though still transcendent, sensibility of the Gothic period.

The following brief summary of the book will emphasize a few more points which seem of particular interest to the reviewer. Generally speaking, Van der Meer may have sometimes seen apocalyptic inspiration where the Gospels, or simply the Christian background, would suffice as an explanation. He has, however, well characterized a fundamental principle of early Christian iconography according to which one representation often suggests a number of others.

In his introduction the author gives a useful, detailed survey of previous studies of the Apocalypse in art. By far the most important of these, so far as illuminated manuscripts are concerned, are the well known works of W. Neuss (especially on the earlier cycles, such as the Spanish commentaries of Beatus and the Carolingian and Ottonian Apocalypses), and of M. R. James (especially on English and French manuscripts of the thirteenth and fourteenth centuries). While generally following Neuss and James

in his classification of these miniature cycles and their lost early Christian prototypes, Van der Meer is more independent in his treatment of monumental representations, particularly the early Christian mosaics and frescoes.

In the first of the four principal divisions of his book, Van der Meer endeavors to distinguish the representations of the apocalyptic Lamb as a veiled theophany (Apoc. v, xii, xiv, xxii) from the many other representations of lambs as symbols of Christ or of the faithful, especially in early Christian art. The well-known representation of the Apostle-lambs on either side of the Agnus Dei which stands on a mountain in paradise appears to be of a somewhat uncertain apocalyptic character despite the interesting remarks of Van der Meer (pp. 41 ff. and especially pp. 47 ff.).

There is no doubt, however, about the apocalyptic origin of the exaltation and adoration of the Lamb by the four and twenty ancients and the four living creatures, a composition which can also be traced back to early Christian times. The same is true of the representation of the Lamb on the Cross or on the altar; the latter links the self-immolation of Christ to the eucharistic sacrifice, thus presenting a symbolical interpretation of Apoc. v, 6: ". . . and, lo, in the midst of the throne and of the four beasts, and in the midst of the elders, stood a Lamb as it had been slain. . . ." The miniature cycles finally depict, in a more or less extensive way, all the different deeds of the Lamb according to the text of the Apocalypse and sometimes (as in certain Carolingian manuscripts of the schools of Tours and of St. Denis) elaborate on allegorical interpretations of the commentators.

The second part of the book deals with the theophanies of the Son of Man. In Apoc. i, 7, there is a prophecy of the second coming of Christ: "Behold He cometh with clouds . . .," which is, however, also to be found in the synoptic Gospels. Therefore the representations of the second coming which occur outside the miniature cycles of the Apocalypse, for instance in the beautiful mosaic of SS. Cosma e Damiano at Rome, can scarcely be considered as purely apocalyptic. The visions of the Son of Man between the candlesticks (Apoc. i, 13) and with the sickle (Apoc. xiv) are, on the contrary, always exclusively apocalyptic; in early Christian and mediaeval art, both have always been identified with Christ, in spite of the hair, "white as white wool and as snow," given to the Son of Man in Apoc. i, 14.

Like the rest of the theophanies of the Apocalypse in early Christian and mediaeval art, the *Maiestas Domini* proper has been almost exclusively identified with Christ and not with God the Father. This holds although "The One Sitting on a Throne" in the text of the Apocalypse suggests rather the Father than the Son. A gradual substitution of God the Father for Christ in the representation of this throne scene is found only from the end of the Middle Ages.

The *Maiestas Domini* is the most important artistic visualization of the apocalyptic vision of "The One Sitting on a Throne," to which Van der Meer devotes the third part of the book. In chapter III of this section in the tracks of Baumstark (*Oriens Christianus*, 1927), he connects the origins of the *Maiestas*

Domini with the early Christian Egyptian (Coptic) liturgy of the Trisagion. Whether this can be proved or not, it is, at any rate, a fact that very early examples of this composition are to be found in Coptic frescoes, for example at Bawit, probably from the sixth century. Egypt and a few other outposts of the Byzantine empire were apocalyptic enclaves in the Christian Orient where the apocalyptic cycle was not generally represented before the end of the Middle Ages, since the canonical rank of the Apocalypse was not established in the East until the fourteenth century.

Besides the typical form of the *Maiestas Domini* there were at least two other important early Christian variations. The first is represented primarily by the mosaic of S. Pudenziana at Rome which is much less hieratic than the typical *Maiestas Domini* and therefore had not so much influence on later development. In this composition Christ is enthroned among the apostles and between personifications of the Church of the Jews and of the Gentiles. The Cross above Him, however, is surrounded by the four living creatures of the Apocalypse. The second variation pictures a vision of the throne without Christ in person; instead it bears the Cross, a diadem, and the Holy Scriptures. It appears thus on the triumphal arch of S. Maria Maggiore at Rome. From this representation developed the Byzantine *Hetimasia*, the empty throne bearing the symbols of the Passion and awaiting the Judge.

In the fourth part the author discusses briefly a few visions of the apocalyptic seer which sometimes have been considered as secondary theophanies: (1) the first of the Four Apocalyptic Riders, the Archer on the White Horse (Apoc. vi); (2) the King of Kings on the White Horse (Apoc. xix); (3) the Son of the Woman Who is Clothed with the Sun (Apoc. xii); (4) the Morning Star (Apoc. ii, 28; xxii, 16); (5) the Alpha and Omega (Apoc. i, 8; xxii, 6; xxii, 13); (6) the Strong Angel (Apoc. v, 2).

Van der Meer's knowledge of the monuments and bibliography is on the whole excellent. Obviously in a study of this kind he had to rely upon the researches of others for such matters as classification and dating. The bibliography might have been more complete in a few cases. In the discussion of the *Maiestas Domini* in French Romanesque art one misses a reference to K. J. Conant's studies on Cluny as published in *Speculum*. E. Peterson's *Buch von den Engeln, Stellung und Bedeutung der heiligen Engel im Kultus* (Leipzig, Hegner, 1935) might have been discussed with regard to the derivation of the *Maiestas Domini* from the old Egyptian liturgy of the Trisagion. Indeed this latter book seems of particular importance with regard to the relation between that iconographic theme and liturgy in general; for Peterson has shown how, according to Scripture and tradition, the angels together with the four living creatures and the four and twenty ancients of the Apocalypse enact a celestial liturgy before the throne of God. Since parts of the Mass are a reproduction of this heavenly liturgy, Peterson's studies enable us to understand more clearly why the *Maiestas Domini* and kindred representations have so often, in early Christian and Romanesque art, found their place in

the apse, that is to say near the center of the terrestrial liturgy, the altar.

Of the two Appendices (*Excursus*), the first deals with the liturgical reading of the Apocalypse, while the second gives a survey of the principal apocalyptic cycles. The six indices are carefully done; the analytical or iconographic index is particularly useful.

The quality of the illustrations is good enough for an iconographic study. Their number, though considerable, might be enlarged in the event of a re-edition.

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LIST OF BOOKS RECEIVED

American Society for Aesthetics, *Who's Who of Charter Members*, November 1, 1942, ed. by Agnes Ongert, Cleveland, Ohio, Cleveland Museum of Art. Pp. 16.

KENNETH JOHN CONANT, *A Brief Commentary on Early Mediaeval Church Architecture*, Baltimore, The Johns Hopkins Press, 1942. Pp. xi+34; 50 plates. \$2.00.

Letters of John B. Flannagan, Introduction by W. R. Valentiner, New York, Curt Valentin, 1942. Pp. 100; 7 plates. \$2.50.

The Future of Aesthetics, A Symposium on Possible Ways of Advancing Theoretical Studies of the Arts and Related Types of Experience, ed. by Thomas Munro. Cleveland, Ohio, Cleveland Museum of Art, 1942. Pp. 111. \$1.00.

W. VERNON KINIETZ, *John Mix Stanley and His Indian Paintings*, Ann Arbor, University of Michigan Press, 1942. Pp. 40; 27 plates. \$5.00.

CLARE LEIGHTON, *Southern Harvest*, New York, The Macmillan Company, 1942. Pp. 157; 57 figs. \$3.50.

CHARLES RUFUS MOREY, *Mediaeval Art*, New York, W. W. Norton, 1942. Pp. 412; 179 ills. \$6.50.

The Museum as a Social Instrument, New York, published at the Metropolitan Museum of Art for the American Association of Museums, 1942. Pp. 70.

Notes Hispanic, New York, The Hispanic Society of America, 1942. Pp. 129; 19 figs.

WILLIAM BARCLAY PARSONS, *Engineers and Engineering in the Renaissance*, Baltimore, Maryland, The Williams and Wilkins Company, 1939. Pp. xix +661; 211 figs. \$8.00.

GISELA M. A. RICHTER, *Kouroi*, New York, Oxford University Press, 1942. Pp. xxi+428. 208 photo. \$15.00.

ANDREW C. RITCHIE, *English Painters: Hogarth to Constable*, Baltimore, The Johns Hopkins Press, 1942. Pp. 61; 36 plates. \$2.25.

WILLIAM SAWITZKY, *Matthew Pratt 1734-1805*, New York, The New York Historical Society in co-operation with the Carnegie Corporation of New York, 1942. Pp. 103; 43 plates. \$5.00.

FRITZ SCHMÄLENBACH, *Kunsthistorische Studien*, Als Manuscript Gedruckt, Basel, 1941. Pp. 139.

ERIC SCHROEDER, *Persian Miniatures*, Cambridge, Massachusetts, Harvard University Press, 1942. Pp. 168; 30 plates. \$5.00.

GUY DE TERVARENT, *Les énigmes de l'art du moyen âge*, Deuxième série art flamand, Paris, Les éditions d'art et d'histoire, 1941. Pp. 80; 20 plates, 40 figures. Price unknown.

Tables of Contents and Classified Index of the Journal of Aesthetics and Science of Art. Translated by Leopold Levis, Cleveland, Ohio, Cleveland Museum of Art, 1940. Pp. 140. \$1.00.

NOTE.—Professor William Bell Dinsmoor has called our attention to the fact that the Archaeological Institute of America has for sale a few remaining copies of the original fascicles of the *American Journal of Archaeology* in which were published articles on the Fine Arts in the field covered by the ART BULLETIN. These articles, most of which appeared between 1900 and 1920, are the work of distinguished scholars in the history of art including Professors Krautheimer, Loomis, Marquand, Mather, Morey, Porter, Swift, and many others. A list of the articles may be consulted in the *American Journal of Archaeology*, Volume XLVI, No. 2 (1942), immediately preceding the Table of Contents. This is an excellent opportunity for scholars to acquire at greatly reduced prices articles of which they have no reprints. Orders will be filled promptly if sent to the Archaeological Institute of America, 504 Schermerhorn Hall, Columbia University, New York City. Ed.

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8. Double quotation marks should be used for primary quotations; single quotation marks will be reserved for a quotation within a quotation.

9. In citing from periodicals, the title of the article should be in roman within double quotation marks, and the title of the periodical in italics. Thus:

Adolph Goldschmidt, "The Decoration of Early Mainz Books," *Magazine of Art*, xxxi, 1938, pp. 579-581.

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Mary H. Swindler, *Ancient Painting*, New Haven, Yale University Press, 1929, p. 60.

Charles Diehl, *Manuel d'art byzantin*, 2nd ed., Paris, Librairie Auguste Picard, 1925, ii, pp. 73-78.

11. In English titles of publications, capitalize all principal words; in Latin, in addition to the first word, capitalize proper nouns and adjectives derived therefrom; in French, Italian, and Spanish, in addition to the first word, capitalize proper nouns but not the adjectives derived therefrom; in German, capitalize all nouns but not the corresponding adjectives, except those derived from names of persons.

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16. The name of the institution with which an author is connected will be printed at the end of his contribution; brackets will be used to denote that the author is a student at that institution.

ANNOUNCEMENT

The College Art Association of America and the Archaeological Institute of America announce their sponsorship of a new series of monographs in the form of *Supplements of the ART BULLETIN* and of the *American Journal of Archaeology*. These *Supplements* would generally be studies exceeding the normal length of articles and yet not of the length or scope of a book. They would be similar in format to these two periodicals, or to the *Supplements of Hesperia*. It is proposed that the Supplement series should appear at irregular intervals depending upon acceptance and financial arrangements. Manuscripts having to do with Early Christian, Mediaeval, Renaissance, Modern, and Far Eastern Art should be submitted to Professor Rensselaer W. Lee, Editor-in-Chief, THE ART BULLETIN, The Institute for Advanced Study, Princeton, New Jersey, for consideration by the Committee on Publications of the College Art Association. Manuscripts falling within the scope of the Archaeological Institute should be submitted to Professor Mary H. Swindler, Editor, *American Journal of Archaeology*, Bryn Mawr College, Bryn Mawr, Pennsylvania.

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